PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

LOWER PROVINCES OF BENGAL

FOR THE YEAR

1888-89.

BY ORDER OF THE LIEUTENANT GOVERNOR OF BENGAL * FORWARDED

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BY

A. L. HOME,

Conservator of Forests, Bengal.

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1889.

No. 128*AR*—*G.*

FROM A. L. HOME, ESQ.,

Conservator of Forests, Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF BENGAL,

REVENUE DEPARTMENT (FORESTS).

Dated { *Darjeeling, the 12th August* / *Calcutta, the 17th August* } 1889.

SIR,

I HAVE the honour to forward herewith the Annual Report of this Department for 1888-89 in print.

2. The figures of receipts and expenditure adopted in the report and in the forms attached were received from the Comptroller and Auditor-General (Forests) on 15th ultimo, with the intimation that a further communication would be made on receipt of advice from the Accountant-General, Bengal, of their agreement with his books, but I have not, up to date, been apprised of the correctness of the figures for final adoption.

I have the honour to be,

SIR,

Your most obedient servant,

A. L. HOME,

Conservator of Forests, Bengal.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN BENGAL

For the year 1888-89;

BY

A. L. HOME,

Conservator of Forests.

INTRODUCTION.

THERE has been no material change during the year under report in the general form of administration of the Department. The chief points worthy of note as to the year's working are the increase of revenue that continues in the Sunderbuns; the depression in trade in the produce of the forests in Chittagong, owing to frontier raids keeping men from visiting and working in the more remote reserves; and the falling off in revenue in Orissa owing to the concessions made to villagers who were threatened with famine: it is satisfactory to learn that the prospects of the crops in Orissa have considerably improved since the close of the year, but some time must elapse before the people can derive any real benefit from this improvement, and there will undoubtedly be considerable difficulties to contend with before the rules in their entirety can be again enforced, and the revenue again rises to its former level.

2. In the Working Plans Division there has again been little or no progress owing to want of officers.

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CHAPTER I.—AREA AND BOUNDARIES.

1.—AREA OF RESERVED FORESTS.

3. The net changes in the area of reserved forests during the year result in an increase of 1,154 acres, the total area on the 31st March 1889 being 3,192,535 acres.

In the Kurseong sub-division 1·4 acres were excluded from the Manjha block of the Manjha forest with effect from 1st April 1888, and made over to the civil authorities to be leased as a location to the New Terai Tea Association. In the Buxa sub-division the Mahakalguri forest, 215 acres, was also declared to have ceased to be a reserved forest from 6th June 1888, and transferred to the civil authorities. The Horhap forest, 1,098 acres, was transferred for administrative purposes from the Singbhoom to the Hazaribagh sub-division, Chota Nagpore Division, from 1st April 1888, and 1,370 acres (approximately), being the computed area of the four deserted villages—Rolamatia, Tonto, Tambua, and Sankojogoda—were added to the Saranda reserve in the Singbhoom sub-division, with effect from 1st October 1888, by a notification under section 19 of the Indian Forest Act, dated 13th November 1888.

4. The forests that remain under settlement as proposed reserves at close of the year are :—

Division.	Forest.	Approximate area.	Date of notification under section 4.
		Acres.	
Darjeeling— Darjeeling sub-division	Addition to Sepoydhura block... ..	2	14th May 1888.
Chota Nagpore— Hazaribagh sub-division	Khoorchoota	7,090	12th May 1885.
Singbhoom sub-division	Porahat (Girga)	16,640	26th November 1880.
	Birda	3,840	20th February 1882.
	Songra	35,200	
	Kundrugutu	28,160	
	Bera	48,640	
Chittagong Division	Ramghur-Sitakund	85,000	22nd October 1888.
	Total ...	224,572	

As regards the proposed addition to the Sepoydhura block, a revised notification under section 4 has issued since the close of the year under report; the proposed reserves in Chota Nagpore are still under the consideration of Government, and the Ramghur-Sitakund tract was still in the Forest Settlement Officer's hands at the close of the year.

A notification under section 4 has issued since the close of the year concerning the proposed Rajin block reserved forest in Khorda, referred to in paragraph 7 of last year's report.

5. The disputes as regards boundaries stand as follows:—That with the Mineral Spring Tea Estate remains as before in the Darjeeling sub-division; that with the Lohagurh Tea Estate in the Kurseong sub-division may be considered as settled, as no further action has been taken by the estate; the boundary between lots Nos. 6 and 7, Khowlea Barisal, and the reserved forest in the Sunderbuns Division has been laid down on the ground.

In the Singbhoom sub-division the boundaries adjoining Native States are reported to have been laid down by the Sub-Deputy Collector, and the boundaries of the Government estate of Angul are said to have been demarcated by the cadastral survey party, but final reports regarding these disputed boundaries have not been received.

6. Payments for compensation for land and rights, aggregating Rs. 95-1, were made by the Deputy Commissioner of Singbhoom:—Chyebassa Range, Saitba forest, Rs. 3-3-6, and Santara forest, Rs. 88-5-4; Kolhan Range, Leda forest, Rs. 3-8-2. In accordance with Government orders, Rs. 875-2-9 were made over to the Deputy Commissioner for payment of additional compensation to ryots in the proposed Porahat forests in Singbhoom, but no portion of the money was disbursed during the year.

2.—Area of Protected and Unclassed State Forests and Waste Lands.

7. The area of protected forests has been increased by 48,100 acres, and stands at close of the year at 1,449,262 acres. In the Sunderbuns Division 10,725 acres were added, by the notification dated 12th April 1888, to the Diamond Harbour Range, and 7,273 acres from that range were transferred to the civil authorities from 12th April 1888, by notifications dated 1st August and 18th September 1888 and 23rd January 1889, to be leased for cultivation; in the Orissa Division a net addition of 44,648 acres has been recorded on receipt of corrected areas from the Settlement Officer.

There has been no change in the area of Unclassed State forests and waste lands, which remains at 2,581,420 acres.

3.—Demarcation.

8. The statement (appendix A) of boundaries and boundary marks in reserved forests has been brought up to close of the year under report, including proposed reserves in Singbhoom and Khorda, and shows the total length of demarcated boundaries to be 2,176·8 miles, marked with 32,353 posts or pillars, and of natural boundaries 1,349·9 miles.

9. The work done during the year is summarized in the following table; the total expenditure debited to "demarcation" is Rs. 7,091, of which Rs. 180

were paid as an *honorarium* to subordinates of the Khorda forest settlements with Government sanction, and the balance Rs. 6,911 + Rs. 66 debited to a wrong head in the Sunderbuns Division, is accounted for below:—

Division or Sub-division.	New Demarcation.			Clearing and maintaining boundaries and boundary marks.				Length of boundaries demarcated and cleared during 1888-89.
	Length of boundaries.	Marks erected.	Cost against A VIIIa, "Demarcation."	Length of boundaries cleared.	Number of marks renewed.	Cost against A VIIIa, "Demarcation."	Charged against A VIIIa, "Roads and bridges," and A VIIIe, "Protection from fire."	
	Miles.	No.	Rs.	Miles.	No.	Rs.	Miles.	Miles.
Darjeeling sub-division	...	...	...	79·4	179	523	...	79·4
Teesta ... ditto	...	...	...	...	1,609	375	195·7	195·7
Kurseong ditto	...	...	...	...	269	92	116·8	116·8
Julpigori ditto	...	...	...	93·7	307	987	...	93·7
Buxa ditto	...	...	...	97·9	524	1,121	...	97·9
Palamow ditto	...	...	...	13·0	53	108	134·3	147·3
Hazaribagh ditto	...	...	...	9·5	124	93	34·4	43·9
Singbhoom ditto—								
Reserved forests	...	28	*	442·7	734	1,568	37·3	480·0
Proposed reserves	...	...	...	295·2	*	689	...	295·2
Sunderbuns Division	1·2	43	71	...	...	...	...	1·2
Chittagong ditto	...	857	*	66·1	305	786	...	66·1
Angul sub-division	...	34	*	1·2	876	161	217·9	219·1
Khorda ditto—								
Reserved forests	...	253	*	1·0	57	250	246·7	247·7
Proposed eserves	13·0	*	153	...	...	...	...	13·0
Total ...	14·2	1,215	224	1,099·7	5,087	6,753	983·1	02,097·

* Not recorded in Divisional and Sub-divisional Annual Reports.

In the Singbhoom sub-division presumably either some boundaries were cleared twice during the year, or the statement in appendix A does not include internal boundaries: the detailed statement that should have accompanied the report has not been submitted.

10. The average cost of new demarcation is Rs. 16 per mile, the same as last year, the expenditure having been maintained at this rate owing to the high wages that have to be paid for work ashore in the Sunderbuns; the average cost of maintenance has been reduced from Rs. 7-2 to Rs. 6-2 per mile, which includes the erection of 1,215 new boundary marks and the renewal of 5,087 old ones.

CHAPTER II.—SURVEYS, WORKING PLANS AND ANNUAL PLANS OF OPERATIONS.

1.—Surveys.

11. In the *Teesta sub-division* the 300 acres of land at Rechila, in the Pankasari Range, that has since been made over to the civil authorities for a settlement, has been surveyed at a cost of Rs. 16.

In the *Kurseong sub-division* the bhuta and cardamom fields situated in the Kuhein block of the Balasan Range were surveyed; cost Rs. 12.

In the *Palamow sub-division* the outer boundary line of the Betlah forest and the portion of the Betlah-Kedh road within the reserve were surveyed with an expenditure of Rs. 3.

In the *Singbhoom sub-division* the Imperial forest survey party completed the survey of the outer and inner boundaries of the reserves, with the exception of a portion of the southern boundary of the Saranda forest, which is still in dispute and unsettled. In accordance with Government orders, the Department has been debited with Rs. 799 for the work done by the survey party, and Rs. 5 were expended in clearing sample plots.

In the *Orissa Division* Rs. 64 were expended in surveying and mapping the Churung block, Dandimal Range, Khorda sub-division, and 75·9 miles of boundaries are understood to have been completed in the Angul sub-division by the cadastral survey party.

2.—Working Plans and Annual Plans of Operations.

12. The authenticated information that has been received regarding the measurements and contents of trees felled by permit-holders, given in appendix B, is again very scanty, and the work carried out under authorized working plans is recorded in appendix C attached to this report.

13. The *Working Plans Division* has continued again practically to be in abeyance throughout the year, for though Mr. M. S. Fowler, Deputy Conservator, was posted to the charge of the Division from December 1888, and did his best to fight against ill-health, he was able to do but little in the way of real work, and had subsequently to proceed on furlough to Europe after submitting a note on the proposed revision of Mr. Chester's draft working plan. It is hoped that Mr. Manson's services will be available for the sole charge of this Division from August 1889. The expenditure incurred under the head "Surveys and working plans" was Rs. 165.

14. *Darjeeling sub-division.*—The operations in the Darjeeling and Jalapahar supply working circles were carried out under the orders contained in Dr. Schlich's working plan of 1882; the out-turn of the former in cubic feet solid wood was 407,254, or 82,254 in excess of the provisions of the plan, and of the latter 100,098, or 74,902 cubic feet less than was provided for; it will thus be seen that, as explained in paragraph 20 of the report for 1887-88, taking the supply of the two circles together, the provisions of the plan gauged the requirements of the stations with accuracy at about 500,000 cubic feet per annum on the average.

15. *Kurseong sub-division.*—The prescriptions of the Sukna working plan were carried out as far as possible, but the results show that the prescribed out-turn in timber is much higher than the forest can yield: those of the Bamonpokri plan were carried out; the out-turn of the primary fellings was 15,536 cubic feet wood, against the prescribed 16,000, and the periodic thinnings that had been neglected in 1887-88 were carried out in the year under report.

16. *Buxa sub-division.*—The fellings in compartment 10 of block II, Poro, of the Buxa reserve working circle, made in advance in 1886-87, as mentioned in paragraph 27 of the report for that year, were completed. This working circle was inspected by the Inspector-General of Forests to the Government of India in March 1888, and his recommendations are, that entirely fresh estimates should be drawn up on the basis of new valuations, and that a revised scheme of treatment be prescribed for these forests—recommendations that will be acted on as soon as the services of an officer can be made available for the work.

CHAPTER III.—PROTECTION AND IMPROVEMENT.

1.—Establishments.

17. Mr. A. L. Home, Conservator of Forests, remained in charge of the Department throughout the year, and continued to officiate in the second grade of Conservators.

18. The vacancy in the controlling staff, caused by Mr. W. Johnston's having retired from the service, was filled by the appointment of Mr. H. H. Haines from Cooper's Hill College, to be an Assistant Conservator with effect from 1st January 1889. Among the Deputy Conservators, Mr. Ellis was absent on three months' privilege leave during the year; Mr. Chester was posted on deputation to the Andamans on return from furlough in November; Mr. Grant remained absent on furlough throughout the year; Mr. Lillingston was absent from duty from 16th April 1888 to 26th January 1889, on subsidiary, special, and extraordinary leave; and Mr. Fowler, after his return from the Andamans, availed himself of privilege leave for two months. Mr. French, Assistant Conservator, was also absent on leave on medical certificate for six months.

19. Among the Sub-Assistant Conservators, Mr. Mendes was absent on three months' privilege leave, and was transferred on deputation to the Central Provinces at the close of the year; Messrs. Slane and Quinnell obtained the Ranger's certificate at the Dehra Dún Forest School, and were confirmed in their appointments, and Mr. James remained at the school throughout the year.

20. There has been continued difficulty in recruiting for the class of forester: the men who accept appointments as a rule are those who have failed to obtain employment elsewhere, and of the newly-appointed foresters in Divisions other than the Sunderbuns and Chittagong, who have been questioned during the year by the Conservator, one man only acknowledged that he prefers a life in the forests to sedentary employment.

The distribution of establishments has remained practically unchanged during the year.

Forester Nobo Kumar Sett obtained the Ranger's certificate at the Dehra Dún Forest School in March 1889; Forester Brindabon Chunder Ghosal failed to obtain a certificate, and remained at the school throughout the year. No men were deputed to the school during the year under report.

21. In the Darjeeling Division three forest guards were prosecuted:—Jagardhun was imprisoned for keeping and grazing ponies in the reserved forest, and carrying on business therefrom; Parissing was fined Rs. 25 for assault and bringing a false charge against five persons of stealing forest produce; Rambhajan, after conviction on a charge of selling a log illegally for Rs. 3, was released on appeal, the Magistrate having tried the case summarily without powers to do so.

In the Julpigori Division, Baboo Bogola Churn Roy, head-clerk, was prosecuted under sections 403 and 408 of the Indian Penal Code, but was discharged for want of satisfactory evidence.

In the Chota Nagpore Division, under orders issued by the Deputy Commissioner of Singbhoom, Baboo Tin Kowry Chowdhry, Officiating Forest Ranger, and Bhanjor Tanti, forest guard, were accused of wrongful confinement and abetment of the same; they were convicted by the lower court, but were acquitted on appeal: Baboo Mohendra Nath Deb, officiating forester, and Lutchman Tanti, forest guard, were also charged with wrongful confinement, the former also with having been implicated in a murder; the officiating forester was convicted of wrongful confinement and fined Rs. 90, which punishment was on appeal reduced to a fine of Rs. 5, and he was acquitted on the graver charge; the guard was acquitted.

In the Chittagong Division, Munshi Gholam Subhan, head-clerk, was convicted in a case brought against him by a forester of having had private money transactions with him, was accused of perjury in these proceedings before the Deputy Magistrate, but acquitted by the Deputy Commissioner; he was also found to have kept back important information from the divisional officer in regard to nominations to vacant appointments, and was removed from the divisional clerkship and posted to the Conservator's office on reduced pay. There were two cases against forester Romesh Chunder Dutt of criminal misappropriation and breach of trust; in one case he was convicted by the Joint-Magistrate, sentenced to 18 months' rigorous imprisonment and a fine of Rs. 200, and subsequently released on appeal, and in the other case he was acquitted: in neither case, however, was the judgment a clear acquittal, and the forester was reduced a grade. Munshi Samiuddin, forester, was tried in a case under section 409 of the Indian Penal Code, in respect of a boat purchased by him without payment of tolls, and acquitted. Forester Mohendra Kumar Biswas was accused by certain parties of wrongful confinement and assault, convicted by the Deputy Magistrate, but released on appeal. Forester Susti Churn Sen (1) absconded on charges being brought against him under sections 409, 378, and 411 of the Indian Penal Code, and has not been arrested up to date; this is the man whose reinstatement is referred to in paragraph 71 of the annual report for 1883-84: in connection with this case the Deputy Commissioner instituted one against Ashdhun Rai, forest guard, for obstructing the police, and he was on conviction sentenced to three months' rigorous imprisonment and fined Rs. 50.

22. The Conservator regrets to have to record that such a large number of serious offences among the lower grades of the Department came to light during the year; though many of the cases resulted in the acquittal of the accused, he has no doubt that every case prosecuted by the Department was a true one, and it is a matter of serious difficulty to know how best to employ men whose integrity there is every reason to mistrust in posts that necessitate their being as a rule left, with little supervision, to control and deal with valuable Government property.

2.—General Protection and Breaches of the Forest Law.

23. By notifications issued by Government under sections 25 (*i*) and 31 (*j*) of the Indian Forest Act, dated 7th and 8th August 1888, respectively, revised rules were promulgated regarding hunting, shooting, and setting snares or traps in reserved and protected forests, and the period from 1st April to 30th September in each year is declared a close season for certain animals and birds specified in the notifications; but there are now no general rules prohibiting the poisoning of water and fishing.

The reserved forests in those districts in which measures for their protection from fire are necessary (except Singbhoom) were also closed against hunting, shooting, and fishing by Government notifications under section 25 (*i*) of the Act during the dry season, and the usual lists of authorized camping-grounds were published by the Conservator.

24. The number of new cases taken into court during the year was 254, against 516 in 1887-88; 9 cases (not 12 as previously recorded) were pending at commencement of the year, and 3 at its close; of the 260 cases decided by the courts, 207, or 79·6 per cent., resulted in convictions, against 90·7 per cent. in the previous year.

25. The decrease in the number of new cases taken into court is principally in the Darjeeling and Orissa Divisions; in the former division this result is attributed partly to a natural decrease of offences committed, and partly owing to the police having refused to enquire into forest cases, while the number of cases compounded has increased: in the Orissa Division this is the result of the relaxation of forest rules owing to the failure of crops, which also accounts cheifly for the decrease in the percentage of convictions for the circle, offenders being let off in most cases owing to the "hard times."

26. In the Sunderbuns Division the proposed arrangements, referred to in paragraph 30 of last year's report, for the prosecution of a certain number of selected cases of non-return of permits practically fell through; 60 cases were selected, but when it came to arranging for their being tried, it was found that the attendance of the Forest officials who had issued the permits would, in each case, be required; this, with former experience of the way in which cases are adjourned owing to non-attendance of offenders and the loss of revenue that occurs when revenue stations are left without officials, decided the divisional officer not to carry out the prosecutions.

27. The usual statement, compiled from form No. 50 with cases compounded under section 67 of the Indian Forest Act added, is here given:—

Division or Sub-division.	Pending, 1st April 1888.		Taken into court, 1888-89.		Total.		Convictions.		Acquitted or discharged.		Pending, 31st March 1889.		Cases compounded.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons	Cases.	Persons	Cases.	Persons.	Cases.	Persons.	Number.	Amount.
Under the Indian Forest Act.														Rs. A. P.
Darjeeling sub division ..	1	1	86	141	87	142	75	125	12	17	...	..	147	550 3 0
Teesta ditto .			6	8	6	8	6	8				...	94	375 14 3
Kurseong ditto	*		11	16	11	16	11	16					80	765 0 0
Julpigori ditto . ..			4	6	4	6	3	5	1	1			8	274 0 0
Buxa ditto .			2	2	2	2	..		2	2			3	19 0 0
Palamow ditto .			3	3	3	3	3	3	.			..	7	51 12 0
Hazaribagh ditto			1	1	1	1	1	1				..	5	18 11 0
Singhboom ditto	†		16	78	16	78	12	26	4	52	..		19	179 8 0
Sunderbuns Division reserved forests			36	60	36	60	30	54	6	6	...	...	788	7,275 1 8
Ditto protected forests	1	1	33	64	34	65	31	62	3	3		..	216	3,038 9 5
Chittagong Division	5	14	9	19	14	33	7	9	5	19	2	5	.	
Angul sub-division .. .	2	2	11	26	13	28	9	14	3	13	1	1	24	64 15 0
Khorda ditto	...		36	78	36	78	19	44	17	34	..		59	135 4 6
Total	9	18	254	502	263	520	207	367	53	147	3	6	1,450	12,747 14 10

* Two cases were shown erroneously as pending at close of 1887 88 against Kurseong sub division.

† One case shown as pending at close of 1887-88 against Singhboom sub-division has been omitted here, as it has since been discovered that the offence was committed on a disputed boundary.

28. Cases disposed of by courts and compounded are classified as follows:—

	Cases disposed of by courts	Convictions.	Percentage of convictions.	Cases compounded.	
				Number.	Amount
					Rs A. P.
Injury to forests by fire	20	15	75 0	9	108 0 0
Unauthorized felling and appropriation of wood and minor forest produce	91	70	76 9	567	7,454 10 6
Grazing without permission or in tracts in which grazing is prohibited	52	46	88 5	276	1,365 4 0
Other offences —					
Fishing without permission in closed forest	2	2		...	.
Breach of rules under section 41, Act VII of 1878	13	10		210	770 6 3
Breach of rules under section 45, Act VII of 1878	3	2			
Breach of orders in section 78, Act VII of 1878	2	2			
Breach of conditions on reverse of permit	59	51	78·3	385	2,974 6 1
Cooking outside authorized camping grounds	4	2		2	3 4 0
Damage to buildings				1	72 0 0
Encroaching and unauthorized cultivation	5	1		.	
Erecting *bathan* on unauthorized site ..	1	1			
Obstructing public servant	1	1		..	
Imperfectly recorded	7	4			
Total	260	207	79 6	1,450	12,747 14 10

29. There is a decrease of 417 in the number of cases compounded, which has occurred chiefly in the Sunderbuns and Orissa Divisions; the cause of the decrease in the former division is not explained, but in the latter it is no doubt due to the general relaxation of forest rules. The system continues to work well.

30. *Darjeeling sub-division.*—The number of new cases taken into court was 86 (141 persons), against 237 cases (309 persons) in the previous year; 75 cases (including one pending case) resulted in the conviction of 125 persons: in 37 cases for unauthorized felling, 30 grazing and 8 "other offences," the punishments by the courts were fines aggregating Rs. 290-8, and in one case the accused was imprisoned for two months. The courts awarded Rs. 71-8 as rewards to informants.

The cases compounded were:—

	Cases.	Compensation accepted.	
		Rs.	A.
Unauthorized felling	36	97	11
Grazing	105	449	0
Breach of condition on reverse of permit ...	6	3	8

No application was received during the year by the Conservator for the grant of rewards to subordinates or informers. The number of cattle impounded increased from 480 to 781 during the year under report.

31. *Teesta sub-division.*—There were prosecutions in 6 cases (8 persons), all of whom were convicted and punished by fines aggregating Rs. 49-14, and the following cases were compounded:—

	Cases.	Compensation accepted.		
		Rs.	A.	P.
Unauthorized felling	12	64	2	3
Grazing	80	308	8	0
Cooking outside camping-grounds ...	2	3	4	0

32. *Kurseong sub-division.*—Convictions were obtained in all the cases taken into court (11 involving 16 persons); 2 persons were imprisoned for 14 days, and the remainder were punished by fines aggregating Rs. 188. The cases compounded were:—

	Cases.	Compensation accepted.	
		Rs.	A.
Unauthorized felling	37	301	4
Grazing	42	391	12
Damage to buildings	1	72	0

33. *Julpigori sub-division.*—Of the 4 cases (6 persons) taken into court, 3 resulted in the conviction of 5 persons, of whom 4 were sentenced to a month's rigorous imprisonment, and 1 was fined Rs. 3; the following cases were compounded:—

	Cases.	Compensation accepted.	
		Rs.	A.
Injury to forests by fire	2	10	0
Unauthorized felling	4	211	0
Grazing	2	53	0

of which amounts Rs. 6 were paid as rewards to informants under the Conservator's orders.

34. *Buxa sub-division.*—The 2 cases in which 2 persons were involved for firing forests were dismissed by the Deputy Magistrate—one for want of direct proof, and the other on the ground that he considered there was enmity between the witnesses of the act and the accused; 3 cases of illicit removal of forest produce were compounded for Rs. 19.

35. *Palamow sub-division.*—In the 3 cases of firing forests alluded to in paragraph 59 of last year's report, the 3 persons involved were sentenced each to 3 months' rigorous imprisonment; the cases compounded were 3 of unauthorized felling for Rs. 12-8, and 4 for grazing for Rs. 39-4.

36. *Hazaribagh sub-division.*—One person was prosecuted and convicted of felling sâl poles, and fined Rs. 10, and 5 cases were compounded for Rs. 18-11, of which 4 were cases of illicit grazing, and 1 of removal of firewood.

37. *Singbhoom sub-division.*—Of the 16 cases (78 persons) taken into court, 12 resulted in convictions—6 for firing forests, and 6 for illicit removal of forest produce, but the orders of the courts are not reported; the other 4 cases were dismissed for want of satisfactory evidence. The following cases were compounded:—

	Cases.	Compensation accepted.	
		Rs	A.
Injury to forests by fire	7	98	0
Unauthorized felling	10	71	8
Grazing	2	10	0

38. *Sunderbuns Division.*—Convictions were obtained in 61 cases (116 persons) out of the 70 cases (125 persons) carried through the courts; the punishments awarded are fines aggregating Rs. 936, and in one case only was a person sentenced to one day's simple imprisonment. Rupees 423-8 were awarded by the courts to subordinates and informers.

The following cases were compounded:—

	Cases.	Compensation accepted.		
		Rs.	A.	P.
Unauthorized felling	416	6,575	6	9
Breach of rules under section 41	210	770	6	3
Breach of conditions on reverse of permit ...	378	2,967	14	1

Of these amounts Rs. 1,509-11 were paid to subordinates and informers under the Conservator's sanction.

39. *Chittagong Division*—Of the 5 cases (14 persons) pending from the previous year, 3 resulted in convictions; 2 men were fined Rs. 25 each, 2 Rs. 2 each, and 1 man was sentenced to 20 days' rigorous imprisonment. Of the 9 cases (19 persons) instituted during the year under report, 2 (5 persons) remain pending at its close, and of the remainder 4 (4 persons) resulted in convictions; 2 persons were fined Rs. 15 each, one Rs. 5, and one Rs. 2. In 2 cases (5 persons), that resulted in acquittals, the Officiating Joint-Magistrate subsequently admitted that he had wrongly acquitted the accused.

40. *Orissa Division.*—In the Angul sub-division the 2 cases pending from the previous year against two surbarakars of Government villages for failing to render assistance in extinguishing forest fires resulted in their conviction, but they were let off with a warning. Of the 11 cases (26 persons) instituted during the year, 1 case (1 person) remains pending, and 7 (12 persons) resulted in convictions, but particulars of the court's orders are not given by the divisional officer.

In the Khorda sub-division 36 cases (78 persons) were decided by the courts, of which 19 (44 persons) resulted in convictions, particulars of which are not, however, recorded. The divisional officer cites 3 cases which were dismissed owing to frequent postponements, and no intimation of the same having been given to the foresters entrusted with the prosecution; one of these cases will, on the recommendation of the Commissioner, not be allowed to drop.

Compensation was accepted in the following cases:—

	Cases.	Compensation accepted.		
		Rs.	A.	P.
Unauthorized felling	45	101	14	6
Grazing	37	95	5	0
Breach of conditions on reverse of permit ...	1	3	0	0

3.—Forest Fires.

41. Special measures for the protection by isolation of forests liable to fires were again taken over increased areas: 1,133,933 acres against 1,001,357

acres during the dry season of 1888; the increase of 132,576 acres is accounted for in the following sub-divisions:—Julpigori, 1,200 acres; Buxa, 1,185 acres; Singbhoom, 130,710 acres; while in Kurseong there was a reduction of 1 acre in the area of the reserves, and in Chittagong it was not considered necessary to take special measures for the protection of the 518 acres forming the Sitapahar plantation.

42. The area attempted to be protected by less extensive measures and by rules was 126,249 acres, or a decrease of 7,040 acres compared with the previous season; this was in the Buxa sub-division, where it was not considered necessary to take any measures for the protection of the Dhumpara forest.

43. The fire-trace records were posted up to the fire season of 1888, but those for 1889 have not yet reached the Conservator's office.

44. The following abstract from form No. 51 shews the areas attempted to be protected and actually protected from fire under the isolation and rules systems, the cost for the season, and the total cost of these operations from 1872 to the close of the fire season 1889 :—

Division or Sub-division.	Up to 31st May 1888, by isolation and by rules.		During dry season 1889.								Total cost of fire protection from 1872 up to 31st May 1889.
	Area actually protected during dry season 1888.	Total cost from 1872.	Area attempted to be protected		Failures		Area actually protected		Amount expended		
			By isolation, &c.	By less extensive measures and by rules.	Under isolation system.	Under rules, &c., system.	Under isolation system.	Under rules, &c., system.	Under isolation system.	Under rules, &c., system.	
	Acres.	Rs.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
Darjeeling sub-division	65,523	1,374	.....	65,533	.....	.....	.....	65,533	.....	31	1,405
Teesta ditto ...	159,823	9,482	103,600	56,232	60	.....	103,540	56,232	1,301	433	11,216
Kurseong ditto ...	55,247	34,245	52,153	3,386	332	.....	51,821	3,386	3,087	83	37,415
Julpigori ditto ...	104,541	13,012	118,343	.....	11,663	.....	106,680	.....	1,697	.....	14,709
Buxa ditto ...	117,732	45,865	114,987	.....	340	.....	114,647	.....	2,096	.....	47,961
Palamow ditto ...	102,134	12,701	120,389	.....	17,728	.....	102,661	.....	878	.....	13,579
Hazaribagh ditto ...	29,767	2,002	29,767	1,098	.....	.....	29,767	1,098	289	5	2,296
Singbhoom ditto ...	187,088	5,155	355,350	.....	273,600	.....	81,750	.....	2,212	.....	7,367
Chittagong Division ...	518	1,047	.....	.....	.....	.....	.....	.....	.....	.....	1,047
Angul sub-division ...	139,182	3,436	179,200	.....	3,700	.....	175,500	.....	1,893	.....	5,329
Khorda ditto ...	58,664	3,225	60,144	.....	397	.....	59,747	.....	3,039	.....	6,264
Total ..	.....	.....	1,133,933	126,249	307,820	.....	826,113	126,249	16,492	552	.....
Grand Total ...	1,020,219	1,31,544	1,260,182		307,820		952,362		17,044		1,48,588

Note.—The figures under Singbhoom sub-division include 20,480 acres of proposed reserves which it was attempted to protect, of which 640 acres were burnt under the isolation system.

45. The area attempted to be protected by isolation that escaped fire was 826,113 acres, or 72·9 per cent. of the area over which special measures were adopted, and the cost of successful protection under that system averaged 3·8 pies per acre; the results of the operations during the dry season of 1888 were 88·9 per cent. of success at a cost also of 3·8 pies per acre. The result on the whole area attempted to be protected in 1889 is success over 952,362 acres, or 75·6 per cent., at a cost of 3·4 pies per acre, the figures for 1888 having been 89·9 per cent. at the same average cost per acre.

The result compares badly with previous records *as* a result for the year. It is due however to the failure in the additional areas attempted to be protected by isolation in Singbhoom, which comprise 130,710 acres out of the increase of 132,576 acres over which such measures were adopted; but of this large area, 400 acres only (part of the Ambia block in Saranda) escaped fire. In all areas the protection of which had been previously attempted under the isolation and rules systems (1,134,646 acres), and over which those systems were continued, fire entered on 163,460 acres, or 14·4 per cent.

46. In the Teesta, Kurseong, Buxa, Hazaribagh, and Khorda sub-divisions the continued success is very satisfactory. The results in the Julpigori and Palamow sub-divisions show a slight improvement only, but those in the Angul sub-division are the greatest success of the year, 97·9 per cent. of the whole reserves having escaped fire, against 77·7 in the previous year.

In the Singbhoom sub-division undoubtedly too much was attempted, and it will be advisable to confine the limits of specially protected areas for the next few years to those that can be properly supervised.

47. The following table is given, as in previous reports, accounting for the whole area of the reserved forests as regards forest fires during the dry season of 1889:—

Division and Sub-division.	Total area of reserved forests.	Burnt: Under isolation and rules, &c., systems.	Burnt: Out of areas liable to fires which were not protected.	Burnt: By the Department with the view to protecting other areas.	Burnt: Out of areas usually free from fires, for which no measures of protection are considered necessary.	Successfully protected under isolation and rules, &c., systems.	Escaped fire without any measures of protection being adopted.	Total area that escaped fire.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Darjeeling Division—								
Darjeeling sub-division	65,533	.....	.....	.....	.....	65,533	.....	65,533
Teesta ditto	159,832	60	.....	.....	.....	159,772	.....	159,772
Kurseong ditto	55,539	332	.....	.....	.....	55,207	.....	55,207
Julpigori Division—								
Julpigori sub-division	118,343	11,663	.....	.....	.....	106,680	.....	106,680
Buxa ditto	169,247	340	.....	2,150	200	114,647	51,910	166,557
Chota Nagpore Division—								
Palamow sub-division	120,389	17,728	.....	.....	.....	102,661	.....	102,661
Hazaribagh ditto	30,865	.....	.....	.....	.....	30,865	.....	30,865
Singbhoom ditto	334,870	272,960	.....	.....	.....	61,910	.....	61,910
Sunderbuns Division	1,011,833	.....	.....	.....	.....	.....	1,011,833	1,011,833
Chittagong ditto	886,740	.....	.....	.....	160	.....	886,580	886,580
Orissa Division:—								
Angul sub-division	179,200	3,700	.....	.....	.....	175,500	.....	175,500
Khorda ditto	60,144	397	.....	.....	.....	59,747	.....	59,747
Total ...	.....	307,180	.....	2,150	360	.....	.....	.....
Grand Total ...	3,192,535	309,690				932,522	1,950,323	2,882,845

Besides the areas of reserved forests above shown, special measures were continued in the Birda and Girga blocks of the Porahat forests in Singbhoom over 20,480 acres, of which 640 acres only were burnt.

48. During the dry season of 1889, 2,882,845 acres, or 90·3 per cent. of all reserved forests, escaped fire, against 92·4 per cent. in 1888—a result which, considering the extremely unfavourable season owing to the general failure of winter rains, is not altogether unsatisfactory.

49. *Darjeeling and Teesta sub-divisions.*—With the exception of 60 acres in three small areas of the Teesta sub-division, the whole of the forests escaped damage from this cause during the season.

50. *Kurseong sub-division.*—Results were again successful during this exceptionally dry season. The 332 acres burnt were in three fires in the Balasan Range. Two of these were in the following blocks of the Mechi forests:—Central Mechi, 30 acres; Lower Mechi, 1 acre; Nepania, 300 acres. The fire in Central Mechi occurred on 10th March 1889, and originated in the adjoining forests of the Manjha Tea Estate, but was quickly extinguished, though it threatened, and as a fact crossed into, the Lohaguri block of the Manjha forest for a few feet at one point: the latter, on 28th March 1889, extended over 300 acres of Nepania and 1 acre of Lower Mechi. Its cause is not known, but it originated inside the reserve at the south-east corner of the Nepania block, and was extinguished by counterfiring. The third fire burnt 1 acre of the Balasan block, and came across from adjoining private forests. The damage done by these fires is reported not to have been excessive.

51. *Julpigori sub-division.*—Again there is a slight improvement to record, 11,663 acres having been burnt out of 118,343 acres attempted to be protected, or 9·8 per cent. against 10·8 in the previous season.

In the Apalchand Range, 5,200 acres of Rajadanga block were burnt accidentally when lighting fire lines; the Kyranti block, 53 acres, was fired maliciously on the night of 10th March, offender unknown: there were three fires in the Chengmari block in March and April which burnt over 410 acres. But in one case was the offender traced, and he on conviction by the court has been sentenced to one month's rigorous imprisonment and fined Rs. 50.

In the Tondu Range there were five fires: in Upper Tondu block two fires burnt over 3,200 acres, of which about half was sâl and half savannah; in Lower Tondu block three fires occurred extending over about 400 acres khair forest and 600 acres savannah. In one case only was the originator secured, and he has since the close of the year been sentenced to 14 days' rigorous imprisonment.

In the Muraghat Range there were seven fires: in Dinah sissu forests about 1,000 acres were burnt in three fires, and in one case only was the originator discovered and convicted by the court; in Muraghat forest two fires burnt over about 500 acres, and in Goshaihat two fires over about 300 acres, but the offenders were not arrested.

The damage done by these fires is not commented on by the Sub-divisional Officer.

52. *Buxa sub-division.*—Results in this sub-division were again exceptionally good, 340 acres only having been burnt out of 114,987 acres specially protected. In the Buxa Range, 30 acres of Rajabhatkawa block, compartment 26, were fired by shikaris in April 1889, two of whom were arrested and on conviction sentenced to two months' rigorous imprisonment. In the Borojhar Range there were two fires—one of 250 acres in the Butri forest, and the other of 60 acres in the Salkuer forest: the former was fired by Bhutia graziers, and one man was arrested by a fire-guard and subsequently rescued by his friends, when the whole party crossed the border. It is hoped they will be arrested on their return to their grazing grounds next season. In the case of firing the Salkuer forest, the accused was released by order of the Magistrate as, though he was the only man in the vicinity of the fire, he was not actually caught in the act of firing the forest.

In the Hill Forests block of the Buxa forest, 150 acres were burnt by the Department, and also 2,000 acres of the Borojhar sissu tract, to protect the sâl-bearing areas; 200 acres of the Gabur Basra forest were also accidentally burnt.

53. *Palamow sub-division.*—The results for the Northern Range, where 710 acres only out of 63,438 were burnt, are very satisfactory as compared with 17,755 acres burnt out of this area in the dry season of 1888; but in the Southern Range 17,018 acres were fired out of a total area of 56,951 acres.

In the Northern Range there were two fires—one of 660 acres in the Betlah forest on 5th April, said to have been caused by the wind having carried fire from a stump on the fire line into the reserve, and the other of 50 acres in the Guneshpore block, Ramundag forest, particulars of which have not been furnished. In the Southern Range three fires have been reported—one on 6th to 8th May, which is estimated to have raged over 10,014 acres, of which 3,014 were in the Seemah forest and 7,000 in the Barasand forest, and is believed to have been caused by men having kindled a fire near the boundary of the Adhe block, which was carried by wind into the reserve, and by a fire having simultaneously been deliberately lighted in the Heswa block; these cases are under investigation. One on 10th May in the Latoo block, Barasand forest, was discovered by a guard and reported to have been extinguished; on the forester visiting the site on 11th, however, it was found to have burst out afresh, and it eventually burnt over 7,000 acres. One on 15th April was extinguished after burning 4 acres of the Barasand block, which it had entered from *khas* lands.

54. *Singbhoom sub-division.*—The particulars regarding individual fires given in the report are vague and meagre, and do not contain any information worth recording. Detailed figures for the completion of the form No. 51 attached to this report as regards the sub-division did not reach the Conservator till 29th July 1889, but these also were unaccompanied by any particulars regarding fires that had occurred.

55. *Chittagong Division.*—No special measures were adopted during the year, which was however one of great drought, and one of the *jhum* fires on 17th April threatened the Kassalong forest: attempts to stop the fire from entering the reserve failed, and 160 acres were burnt, as also the range head-quarter buildings.

56. *Orissa Division.*—In the Angul sub-division results were more successful than in any previous year, 3,700 acres only having been burnt out of the whole area of reserves, 179,200 acres. The divisional report is again wanting in details regarding fires, beyond that in one case in which 1,500 acres in the Pampasara beat, Tikarpara Range, were burnt, the originators were arrested and sent up for trial in March; in the case of 100 acres being burnt in the Kotrangi beat of the same Range, the offenders were punished with 15 days' imprisonment; the fire of 180 acres in the Majipara beat, Bagmunda Range, was accidental; the man who fired the 640 acres in the Durgapur block was imprisoned for 10 days, and the originators of the fire which spread over 1,280 acres of the Simlipoda block, Durgapur Range, were not discovered.

Regarding the sentences passed in fire cases, the Commissioner records that they are too light—an opinion in which the Conservator fully agrees.

In the Khorda sub-division results were also good, 370 acres only having been burnt out of 60,144 acres. There were in all 12 fires, of which two only were of considerable extent—one of 93 acres in the Panchgarh block, Khorda Range, and the other of 200 acres in the Arang block, Banpur Range. In no case was the originator of a fire arrested.

4.—Grazing and Fencing.

57. No changes have been made in the grazing rules in force. In Khorda the rules were relaxed owing to the partial failure of crops.

58. *Darjeeling sub-division.*—There has been no difficulty in regulating the grazing for the Darjeeling and Jalapahar supply during the year, but breaches of rules on the part of carriers attached to the Sikkim Field Force had to be dealt with leniently in order to avoid causing difficulties to the Military authorities. Sheep grazing in the Singalila Range numbered more than double those that availed of the grazing in 1887-88, and the number of cows grazed for the station milk and butter supply, as well as in the Singalila forest, increased considerably. The increase in the station supply of the number of milch cattle was under an arrangement with the graziers, who were allowed to take an extra percentage of cows into the forests on the condition that they and their men remained unconvicted of any forest offence for 12 months. The arrangement has worked very satisfactorily, and has resulted in a considerable reduction in forest offences by graziers.

The extent to which grazing was allowed is shown in the following table:—

						Average number grazing daily.
Cows,	one-month permits,	3,557	...	...	...	457
„	three-month „	644				
Bullocks,	one-month „	647	...	...	...	54
Buffaloes,	three-month „	50	...	...	...	12
Sheep	„ „	1,631	...	...	...	408

Compensation was also realised for the illicit grazing of 527 animals of sorts and removal of fodder. The total revenue from grazing and sale of fodder grass was Rs. 4,191 (including Rs. 6 realised in the Divisional office) against Rs. 3,441 in 1887-88, and Rs. 86 were expended on fencing.

59. *Teesta sub-division.*—There has again been a considerable increase in the receipts from grazing and the sale of fodder grass, due to the establishment of the Transport Company along the Teesta Valley Road and to the requirements of the troops forming the Sikkim Field Force. The increase has been from Rs. 1,305 to Rs. 1,995, including compensation accepted for the grazing of 671 animals and the illicit removal of fodder.

The daily average number of cattle grazing on permits was as follows:—

	Buffaloes.	Cows.	Bullocks.	Goats.	Sheep.	Ponies.	Total.
On one-month permits, at ordinary rates ...	99	293	31	6	...	2	431
„ three-month permits, at reduced rates (Government tenants)	103	836	...	1	12	7	959
„ twelve-month permits, free (33 mandals) ...	...	130	...	...	...	4	134
Total ...	202	1,259	31	7	12	13	1,524

60. *Kurseong sub-division.*—The arrangements for grazing were the same as in the previous year, and a daily average of 20 cows for the convenience of Dow Hill School grazed in parts of compartments 4 and 5 and in compartments 6 and 7 of the Dhobijhora forest, where Rs. 70 were expended on fencing. The average number of cattle grazed daily in the reserves was 57 buffaloes, 58 cows, and 19 bullocks. The receipts from grazing dues and sales of fodder (including compensation accepted for the illicit grazing of 288 animals) amounted to Rs. 1,141 against Rs. 837 in 1887-88, and 952 head of cattle were impounded during the year.

61. *Julpigori sub-division.*—Grazing was not allowed in any of the reserves during the year. Rupees 53 were accepted as compensation for the illicit grazing of buffaloes in the Tondu Range.

62. *Buxa sub-division.*—The number of cattle grazed daily on the average for the Buxa cantonment supply was 6 cows and 149 buffaloes, while 1,071 daily permits were issued for elephants; the total receipts from grazing dues having risen from Rs. 332 to Rs. 355.

63. *Palamow sub-division.*—The forests remained open to grazing throughout the year, though experience shows that it will be necessary in future to restrict general grazing in the Betlah forest as much as possible, as the draught cattle necessary to work out bamboos for the Department alone are found to cause considerable damage to reproduction. The daily average number of cattle grazing on permits was 555 buffaloes, 30 buffalo-calves and 190 cows, and the revenue under this head, including Rs. 41 received as compensation, was Rs. 560 as compared with Rs. 537 in 1887-88.

64. *Hazaribagh sub-division.*—Grazing was allowed as follows in the Horhap reserve to residents of the Horhap village only. Daily average number of cattle:—buffaloes, 13; cows and bullocks, 44: 72 one-day permits for stall-feeding were also issued for buffaloes and 1,043 for bullocks. The receipts from grazing dues and sale of fodder (including Rs. 19 accepted as compensation) amounted to Rs. 64.

65. *Singbhoom sub-division.*—Grazing was availed of by a daily average of 850 buffaloes and 40 cows. The revenue received (including Rs. 10 compensation) was Rs. 336, against Rs. 315 in the previous year.

66. *Orissa Division.*—In the reserved forests of the Angul sub-division permits were issued for the grazing of the following average daily number of cattle on payment:—308 buffaloes, 73 buffalo-calves, and 20 cows. The revenue derived from this source (including Rs. 100 accepted as compensation) was Rs. 513, against Rs. 615 in the preceding year.

From the Khorda protected forests the receipts were Rs. 103, against Rs. 170 in 1887-88, for the grazing of a daily average number of 45 buffaloes. Part of the reserves as well as the protected forests were opened to free grazing, owing to the drought that prevailed during part of the year, for cattle owned by residents of the Government estate; particulars regarding this will be found in Chapter IV.

5.—Natural Reproduction.

67. *Darjeeling sub-division.*—The year under report was one of abundant seeding of almost all forest trees, particularly of oak, magnolia and other trees which seed profusely at times only and at considerable intervals; but, as has been previously recorded, natural regeneration has not at present a fair chance in these forests generally, and its possibility in the Singalila Range has been further rendered prohibitive during the year by the increase in the number of sheep that have grazed there.

68. *Teesta sub-division.*—The only remark recorded by the Sub-divisional Officer in the note-book is, that in the Ambiok block (Dalingkot forest, Punkasari Range) Taroo or Tama bamboos were in flower in January 1889; this is the *Dendrocalamus Hamiltonii*, and seeds have since been collected and sent to Port Blair and to the Gorakhpur Divisional Officer, Oudh Circle

69. *Kurseong sub-division.*—The remarks recorded show very satisfactory results of regeneration of sâl in all the Terai ranges; chilauni are also plentiful in the Lamagumba block, Bamonpokri Range, and in the Manjua block, Balasan Range, where also lampatia and panisaj seedlings are doing well; in the Dhobijhora forest, Kurseong Range, maple and champ seedlings have been specially noticed.

70. *Julpigori sub-division.*—The results continue to be good in areas that have been continuously fire-protected, and in many places the savannah is giving way to the influence of young sâl poles.

71. *Buxa sub-division.*—Reproduction of sâl continues to be very satisfactory, and the mallata is also making good progress in suppressing savannah growth. Sâl blossomed very profusely in March, and it is intended to make broadcast sowings in all ranges. A caterpillar was found doing considerable damage to the leaves of sâl saplings, but the white caterpillar, whose ravages were noticed in previous reports, has almost entirely disappeared; specimens of both kinds have been sent to Dehra Dún for identification.

72. *Palamow sub-division.*—Sâl seedlings have been specially noticed as springing up in the Southern Range near Neterhaut and Adhe, and in the Northern Range near Garhee and Ooreya, where there are sound mature trees that produce healthy seeds. Bamboo seedlings are also numerous around clumps that seeded in the Betlah, Kedh, Ramundag and Kumandi forests of the Northern Range and near Adhe in the Southern Range.

The following observations are recorded regarding the growth of bamboos from rhizomes:—Clumps that had been overcut produced but few culms and

those of diminished girth; the same result followed when the fuller matured and thicker culms in clumps were left, while the younger and thinner ones were cut out; natural reproduction was influenced by the distance from the root at which the culms had been cut: the closer to the ground, the greater the deterioration in the next year's growth.

73. *Hazaribagh sub-division.*—Natural reproduction of all indigenous trees is good, and it has been reported that sâl trees are not dying off to the same extent as was noticed in paragraph 73 of last year's report. It is however remarkable, as was noticed by the Conservator in his tour, that in the Koderma reserve sâl does not make as good growth as elsewhere; there is scarcely a sâl tree in the whole forest that has grown beyond the sapling stage, and but one tree was observed during a two days' tour in the reserve over 3 feet in girth. Mr. Davis, who inspected the forest in 1879-80, gives it as his opinion that there has been no improvement in growth during the last nine years.

In the Horhap forest, however, the growth of sâl is very satisfactory, and its reproduction abundant.

74. *Singhboom sub-division.*—The general remarks made by range officers in their journals show that, as far as their observations are recorded, reproduction is good, but that subsequent results are seriously retarded by fires.

75. *Sunderbuns Division.*—From extracts given from Mr. Wylly's journals, it appears that in every place at which he examined the forest he found natural reproduction, especially of sundri, to be all that could be desired; he also discovered that when immature sundri trees are cut, it coppices, and in one place he counted about 1,600 poles to the acre. The divisional officer remarks that he has noticed when the forests are cut out to excess a growth of null grass springs up which chokes all other growth: this is a point that must be more fully enquired into.

76. *Chittagong Division.*—The difficulty experienced in preventing the spread of the Múli bamboo (*Melocanna bambusoides*) in the Sitapahar reserve is seriously interfering with the plantation work in lines as hitherto carried out. The Mitenga bamboo (*B. Tulda*) again seeded in July 1888 both at Sitapahar and Rangamatti, and seed was supplied to the Royal Botanical Gardens, Seebpore. Reports were received that the Múli and also the Bariala bamboo were seeding, but no seed could be obtained; the year was a particularly favourable one for the flowering of bamboos, as it was exceptionally dry, and one of its peculiar features was the profuse and early flowering of most of the forest trees: thus the semal (*Bombax malabaricum*) flowered in November instead of January, and the nagesar (*Mesua ferrea*) in January instead of in May.

The teak seeded abundantly, as did also the paper mulberry (*Broussonetia papyrifera*), which is being naturally reproduced in all parts of the forests on both banks of the Kornafuli river through the medium of birds; young seedlings of this tree are now frequently found on the river banks, or in thickets and under thick-foliaged trees to which birds resort to roost.

77. *Orissa Division.*—The remarks recorded are to the same effect as those noted in last year's report, viz., that where fires and excessive grazing are absent, the natural reproduction in the forests is excellent.

6.—Artificial Reproduction.

78. The following table contains particulars of this work:—

Division or Sub-division.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.	
	Area.	Cost.	Area.	Cost.	Area.	Cost.
Regular Plantations.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Darjeeling sub-division	1,194	43,072	60	1,806	1,254	44,878
Kurseong ditto	805	45,345	2	320	807	45,665
Julpigori ditto	3	230	...	...	3	230
Chittagong Division	551	53,473	37	3,167	588	56,640
Khorda sub-division	201	3,588	43	572	244	4,160
Total ...	2,754	1,45,708	142	5,865	2,896	1,51,573
Cultural operations.						
Darjeeling sub-division	26	1,159	...	255	26	1,414
Teesta ditto	2	16	...	...	2	16
Kurseong ditto	295	4,264	...	39	295	4,303
Buxa ditto	619	16,621	...	49	619	16,670
Chota Nagpore Division	...	92	...	...	...	92
Palamow sub-division	...	59	...	18	...	77
Hazaribagh ditto	...	34	...	1	...	35
Singbhoom ditto	...	74	...	33	...	107
Angul ditto	2	146	...	14	2	160
Khorda ditto	13	203	24	563	37	766
Total ...	957	22,668	24	972	981	23,640
Grand Total ...	3,711	1,68,376	166	6,837	3,877	1,75,213

And the areas are classified as follows :—

Division or Sub-division.	Hill trees— Oak, &c.	Hill trees— Tún, &c.	Teak, Tún, Sál, &c.	Conifers.	Bamboos.	Miscellaneous.	Total.
Regular Plantations.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Darjeeling sub-division	632	472	...	...	150	...	1,254
Kurseong ditto	48	...	457	13	236	53	807
Julpigori ditto	...	...	3	...	...	...	3
Chittagong Division	...	...	574	...	...	14	588
Khorda sub-division	...	...	244	...	...	...	244
Total ...	680	472	1,278	13	386	67	2,896
Cultural operations.							
Darjeeling sub-division	26	...	...	...	...	...	26
Teesta ditto	...	...	2	...	...	...	2
Kurseong ditto	210	...	76	...	1	8	295
Buxa ditto	...	...	618	...	...	1	619
Angul ditto	...	...	2	...	...	...	2
Khorda ditto	...	...	37	...	...	...	37
Total ...	236	...	735	...	1	9	981
Grand Total ...	916	472	2,013	13	387	76	3,877

79. The extensions of the year (166 acres) comprise 142 acres under regular plantations and 24 acres under cultural operations, and cost, with up-keep of old plantations and the formation of nurseries, Rs. 6,837; the average cost of the total area under artificial reproduction up to the close of the year under report is therefore Rs. 45 per acre, the same as at close of 1887-88. The work of the year was chiefly filling in blanks and keeping old areas clear of coarse growth.

80. *Darjeeling sub-division.*—The Dooteria plantation was further extended by 60 acres, and 34,692 plants were put out, chiefly oak, and vacancies in Poomong were filled with 3,650 oak, 2,300 champ, and 1,100 tún and pipli. Under cultural operations, 4,087 champ and 3,750 oak were planted out in Sepoydhura block. The particulars given in the report refer to expenditure only, and these particulars have been obtained from the monthly accounts, the Range plantations journals having been found to contain no particulars on the subject.

81. *Teesta sub-division.*—The plants put out in the previous year in the Seem block are reported to be doing well.

82. *Kurseong sub-division.*—The only addition was 2 acres in the Dhobijhora block, in which the vacancies in old plantations were restocked by 4,150 transplants of natural grown seedlings from the Babukhola forest, chiefly of champ, kawala, tarsing and chilauni, and a nursery was formed; in the Bamonpokri Range 2,000 India-rubber cuttings were put out along fire lines; in the Sukna Range 4,300 rubber cuttings were put down in nurseries at Sukna and along the south boundary of the Chamta block; 725 cuttings were also transplanted along fire lines in the Balasan Range, and 250 in the Terai Range. The report submitted is very meagre, and gives no particulars of results.

83. *Buxa sub-division.*—The mahogany plants in compartment 15 of the Rajabhatkawa block that have survived (97 out of the 142 referred to in paragraph 82 of last year's report) do not show much improvement, but the sâl put out with them are thriving. In August and September 2,846 mahogany seed were sown in prepared beds, but 243 only germinated; and of these but 186 were alive at close of the year. An experiment was made in sowing $\frac{1}{4}$ lb. India-rubber seed obtained from Assam in soil composed of half charcoal dust and half leaf mould, but not one seed germinated. The old plantations are all doing very well, and an experiment is being made with the view to keeping fire out of the Buxa reserve by sowing mallata along the south boundary, as it is found to keep down grass growth on the savannah tracts.

84. *Chota Nagpore Division.*—In the Palamow sub-division, 52 mahogany are reported to have survived, but the divi-divi were all killed by white ants attacking their roots; in Hazaribagh all the mahogany died, and 20 divi-divi survived; in Singbhoom the plants of both kinds are doing well.

85. *Chittagong Division.*—The area chosen for the extension of the Sitapahar plantation was 37 acres to the west of the plantations of 1887-88, on which 50,504 plants were put out, chiefly teak, jarul, tún, sissu and pitraj, while vacancies, chiefly along the line in which the teak seed at stake failed

in the previous year, were filled with 3,556 plants of teak and jarul. The year was not at all favourable to the young transplants establishing themselves owing to the irregular and fitful rainfall: June and July were comparatively dry months; in August the fall was abnormally heavy, and subsequently there was a fall of less than 7·5 inches in the six months October to March.

Near the Kukighat nursery 100 transplants of mahogany were put down in August; the young trees have not escaped the ravages of borers which attack the roots and of small grubs which destroy the terminal buds, but have on the whole made good growth and average 10 feet in height. With the exception of a few trees in the Fakirchur plantation, those that have survived the attacks of insects are not doing well; they suffer from wet rot, especially in the forks of the branches, and it is suggested that the general failure of mahogany at Sitapahar may be partly due to a deficiency of lime in the soil.

A rubber (*Ficus elastica*) nursery was formed during the year, but owing to careless planting only about 500 out of 1,000 cuttings put down struck; those that survived are doing well. The exports of rubber from the Hill Tracts are seriously falling off (171 maunds in 1887-88 against 964 in 1879-80), which indicates an exhaustion of the trees in the forests, and it is proposed to extend the plantations at Kaptai.

86. *Orissa Division.*—In the Khorda sub-division the Barunai Hill plantation was extended by 43 acres; on the slope of the Dhowra hill 17,800 tún seedlings that had been raised during the previous year were planted out in 35 strips 10 feet apart, following the contour of the hill. The old teak lines, in which the young trees are doing very well, as are also the tún, were weeded of grass and jungle, and a small nursery was formed near Hargaria, at the foot of Dhowra hill, in which some of the teak seed received from the Central Provinces was sown, but it failed to germinate.

In compartments 6 and 8 of the Churung block, 10 acres were planted up with sâl, tún, kongora and piasal, as were also 10 acres in the Chandka block, compartment 9, where some mahogany plants and ceara rubber seedlings, raised from seed obtained from a tree in the sub-divisional office compound, were also put out. These latter, which were watered every other day, have succeeded well, though the rubber seedlings were a good deal damaged by wild monkeys, but all the newly-planted areas suffered considerably from drought, and want of rain has told heavily on them. Of 3 maunds of teak seed sown in nurseries in compartment 6 of the Churung block, about 3 per cent. only germinated; it is presumed that the seed received this year from the Central Provinces had either been gathered from immature trees, or was damaged in transit, as about the same results only were obtained in seed beds at the Chandka Range officer's head-quarters. Of 2 lbs. of mahogany seed received from the Royal Botanical Gardens, Seebpore, only 21 germinated, though they were carefully sown by the divisional officer.

At Ghosariparia and Bhalunkiparia the teak trees were cleared of grass and vacancies were filled up, and at Chandmari 5,200 chakandi plants were raised, which will be put out in the Chandka and Churung blocks.

No mention is made in the divisional report of the young tún that had germinated well in the previous year at Tikarpara, in the Angul sub-division.

7.—Cutting of Creepers, cleanings, and early thinnings.

87. The area over which creepers were cut is 29,000 acres in all, chiefly in Julpigori, Buxa, Singbhoom, and Orissa, and improvement thinnings and cleanings were carried out over certain areas in Kurseong, Chittagong, and Orissa.

88. *Teesta sub-division.*—The following work is reported as regards cutting creepers:—West Teesta Range, Raiang block, 720 acres (said to have been imperfectly done), and Chel Range, Mungpong forest, 1,200 acres, at a total cost of Rs. 139.

89. *Kurseong sub-division.*—Creepers were cut in the following blocks:—Sukna Range, Adalpur block, 346 acres; Kuklong block, compartment 1, 148 acres; also over certain areas in the Bamonpokri Range, not specified in the report, which work was not paid for during the year. Improvement thinnings and cleanings were carried out in compartment C1 of the Bamonpokri forest.

The total cost of these operations, including Rs. 70 expended on fencing in the Dhobijhora forest, was Rs. 157.

90. *Julpigori sub-division.*—Rs. 171 were expended on the cutting of creepers in the following areas:—Tondu Range, Upper Tondu block, 1,990 acres, and Lower Tondu, 2,000 acres; Falakata Range, Dulgaon forest, 900, and Dumchi forest, 1,500 acres.

91. *Buxa sub-division.*—The following areas were cleared of creepers:—Buxa Range, Poro block, compartment 6, 1,136 acres, and Rajabhatkawa block, compartments 16, 1,280 acres; 17, 200 acres, and 18, 1,280 acres; Borojhar Range, main sâl tract, 2,000 acres. The expenditure, Rs. 75, charged during the year is made up of Rs. 58 for work done in 1887-88, Rs. 6 for work on 196 acres of the Borojhar sâl tract, and Rs. 11 for clearing sample plots and a camping-ground, which latter work should have been debited to protection from fire. It is explained that work was not carried out to the full extent contemplated owing to scarcity of labour.

92. A note on climbers found in the forests of this sub-division by Mr. Green is here recorded, being of general interest:—

"There are five principal climbers which do more or less damage to trees, viz.—dabri, goja, arari, pani-lahra, siris-lahra.

"Of these the dabri (*Spatholobus Roxburghii*), which attains a girth of 3 to 4 feet, is the most injurious. It binds itself firmly round the trees, and I have often seen them nearly covered by the new growth of the trees on which they are entwined. I have noticed many dead sâl saplings which bore marks of having been bound by this creeper, and have no doubt that they succumbed owing to the sap having been unable to reach the branches and leaves. In most cases if the dabri is cut when it has attained a girth of 12 inches or more, it dies down. I have, however, seen cases where it has been cut and the root portion has died, but the severed part adhering to the tree has thrown down roots which have established themselves in the ground; in one instance I noticed this when the climber had been cut at about 10 feet from the ground. It would be interesting to know at what rate these ærial roots grow, and how the climber is nourished before the roots reach the ground. If the climber is cut when it is less than 12 inches in girth, it throws out shoots from the stool, which in three or four years are large enough to damage the trees on which they climb.

"The arari, which attains a girth up to 2½ feet, has a leafless stem, climbs loosely up the bole of a tree, and covers the crown with its comparatively dense foliage, thus preventing the tree's growth.

"The goja is more or less a creeper for the first four or five years of its existence, and it then begins to climb into trees. Its foliage is not very dense, but it does some damage by the firm hold it gets round trees.

"The pani-lahra is harmless practically, but takes a lot of killing, as it throws out numerous shoots when cut.

"The siris-lahra is similar somewhat to the arari in the way it injures trees, and in its growth; it is more common in the forests of the lower hills than in the sâl forests."

93. *Singbhoom sub-division.*—Creepers and climbers are reported to have been cut over about 10,000 acres of the Leda forest, Kolhan Range, and in the Ambia block, Saranda Range, for which no statement of area is given in the report. The amount charged for this work during the year is Rs. 120.

94. *Chittagong Division.*—In the teak plantation at Halingamara, about 9 acres were subjected to cleanings and light thinnings—a work which requires more attention than it has hitherto received. The poles extracted were used departmentally, and the cost of felling, &c., was charged to the work on which they were used.

95. *Orissa Division.*—Improvement thinnings were made over 11 acres in compartments 4, Churang block, and 1, Chandka block, departmentally, and over 30 acres in compartment 12 of the latter block through contractors, who were allowed to remove the fellings at half ordinary rates in lieu of payment for work done. Creepers were also cut over the following areas:—Angul sub-division, 3,200 acres, blocks not specified; Khorda sub-division, Haripur block, 800 acres; Arang block, 1,200 acres. The total expenditure was Rs. 187, and 40 cart-loads of creepers were also cut and removed by purchasers.

8.—Experiments and Exotic trees.

96. The mahogany seed received this year from the Superintendent of the Royal Botanic Gardens, Seebpore, again turned out an almost entire failure, though great care was taken in sowing.

97. *Darjeeling sub-division.*—A few seeds of two kinds of *Quercus* and one of *Castanopsis*, received from Burma through the Superintendent, Royal Botanic Gardens, were sown at Lopchu, of which two seeds of oak (kind No. 1) and one seed of *Castanopsis* only germinated.

98. *Kurseong sub-division.*—The report contains no information under this head, though a few seeds of *Podocarpus elongatus* (common, bastard or Ontenigua yellow-wood) and of *Pteroxylon utile* (sneeze-wood) received from Cape Colony through the Conservator, School Circle, were sent to the sub-divisional officer during the year to be experimented with.

99. *Chittagong Division.*—Less than 4 per cent. of the 3,360 mahogany seed germinated; the young plants were doing well in pots at the close of the year. The *Pithecolobium Saman* flowered in May 1888, but did not mature seed during the year; the seed matured however in April 1889, and at the time of writing seedlings are doing well. The paper mulberry seeded profusely in July and August; in September two rubber (*Ficus elastica*) trees were noticed in flower at Kaptai, one of which had been planted out in 1876 and the other in 1883, and some figs were collected and sown in February, but the seeds have not germinated. The divi-divi also flowered, but the pods dropped before ripening. About 2 seers of ceara rubber seed were collected and sown in January, but up to date a few only have germinated.

100. *Orissa Division.*—The mahogany plants continue to do well, and tún is making very good growth both in Angul and Khorda.

9.—Communications and Buildings.

101. New export roads were opened over 42·1 miles, and inspection paths over 34·6 miles, the chief work of the year under both heads being in the Darjeeling sub-division, where further extensions are much needed.

102. A summary of the work on communications is given in the table below, which shows the total cost of 76·7 miles of new extensions to be Rs. 4,660, and of repairs, Rs. 6,719, and accounts for the total expenditure of the year under roads and bridges, Rs. 11,379. The following is a brief note of the new lines opened:—

Darjeeling sub-division.—The Goompahar cart road has been extended from Lepchajagat to Gyreebas, 3·5 miles, by the Public Works Department, and 3 feet export roads have been opened by this Department from Sukiapokri to Manibhanjan (5 miles) and to Ranichuttia (8 miles) on gradients that can be converted into carting roads: 19·5 miles of inspection paths have been opened in the Goompahar, Tukdah and Singalila Ranges. *Teesta sub-division.*—7·8 miles of fair-weather export roads were opened along the south boundary of the Leesh and Mungpong blocks, and approximately following the Gorubathan-Paren path through the Mal forest, and 4·6 miles of inspection paths were opened in the East and West Teesta Ranges. *Kurseong sub-division.*—The Dhobijhora central forest road was extended by nearly one mile. *Julpigori sub-division*—9·5 miles of inspection paths were opened in the Tondu Range. *Buxa sub-division.*—The 23rd mile trace in the Buxa reserve was continued through compartments 1 and 2 of the Poro block, and a footpath was opened from the western boundary line, Raidak sissu tract, to Teamarighat in the Haldibari Range. *Palamow sub-division.*—The Kechkee-Gorhee road was extended by 5·5 miles to Moondah village. *Singbhoom sub-division.*—In the Porahat Range the Sonua-Jilingutu road was extended to Arjunpur, 6·4 miles, and the Lojro-Kumartondung road to Borai, 4 miles, in the Kolhan Range. *Orissa Division.*—A short inspection path was opened in the Kuhuri block, Khorda sub-division:—

Division.	New lines opened.		Existing lines repaired.		Cost.	
	Export roads.	Inspection paths.	Export roads.	Inspection paths.	New works.	Repairs.
	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.
Darjeeling sub-division	16·5	19·5	2·8	18·7	3,080	911
Teesta ditto	7·8	4·6	...	115·6	634	721
Kurseong ditto	·9	...	23·7	24·9	102	740
Julpigori ditto	...	9·5	54·0	20·2	98	544
Buxa ditto	1·0	·4	17·2	74·8	34	340
Palamow ditto	5·5	...	19·4	...	300	213
Hazaribagh ditto	...	...	39·0	...	...	280
Singbhoom ditto	10·4	...	169·2	29·4	410	2,505
Chittagong Division	...	...	12·0	15·0	...	228
Orissa ditto	...	·6	41·3	...	2	237
Total ...	42·1	34·6	378·6	298·6	4,660	6,719

The expenditure on repairs includes the cost of bridges and their maintenance.

103. The work on buildings is explained in the following table; the principal new buildings are:—Inspection bungalows, 2; range head quarters, 2 built and 2 completed; rest-houses, 2; charcoal shed, 1; pavilion, 1; clerks' quarters, 1; and several out-houses and guards' huts:—

	Cost. Rs.	Total. Rs.
Darjeeling sub-division—		
Construction charcoal godown, Sukiapokri ...	331	
Ditto rest-house, Manibanjhan ...	121	
Ditto pavilion, Goom rock	173	
Ditto out-houses to range and inspection bungalows	131	
Ditto guards' huts (25)	141	
Alterations Darjeeling fuel depôts	337	
Repairs to all buildings	579	
Pay of bungalow chowkidars	120	
		1,933
Teesta sub-division—		
Construction new head-quarters bungalow, West Teesta Range	200	
Ditto ditto, Pankasari Range	150	
Ditto out-houses and stables	51	
Ditto guards' huts (8)	71	
Repairs to buildings at head-quarters	257	
Ditto ditto in ranges	348	
Pay of bungalow chowkidars	262	
		1,339
Kurseong sub-division—		
Roofing with corrugated iron and general repairs to head-quarters buildings	1,173	
Repairs to buildings in ranges	311	
Construction guards' huts (8)	77	
Pay of bungalow chowkidars	539	
		2,100
Julpigori sub-division—		
Construction inspection bungalow at Ramshai hât	460	
Ditto out-houses at range head-quarters	22	
Ditto guards' huts (3)	30	
Repairs to buildings at head-quarters	201	
Ditto ditto in ranges	189	
		902
Buxa sub-division—		
Construction inspection bungalow at Rajabhatkawa	618	
Ditto two out-houses at ditto	34	
Ditto a well at ditto	20	
Ditto guards' and mahouts' huts (6) ...	35	
Repairs to buildings at head-quarters	239	
Ditto ditto in ranges	280	
Ditto ditto in depôts	55	
		1,281
Palamow sub-division—		
Construction guards' huts (2)	50	
Repairs to buildings at head-quarters	17	
Ditto ditto in ranges	407	
		474
Hazaribagh sub-division—		
Repairs to buildings	60	
Chowkidars' pay	36	
		96
Singbhoom sub-division—		
Construction rest-house at Kumartondong ...	150	
Ditto guards' huts (2)	20	
Repairs to buildings at head-quarters	24	
Ditto ditto in ranges	301	
Chowkidars' pay	182	
		677
Sunderbuns Division—		
Completion new station-house at Dacope ...	376	
Ditto ditto at Jewdhara, with out-house	468	
Repairs to buildings	462	
		1,306
Chittagong Division—		
Construction clerks' quarters and out-houses at head-quarters	290	
Ditto out-houses at revenue stations and in ranges	79	
Construction coolie lines at Kaptai	280	
Repairs to buildings at head-quarters	339	
Ditto ditto at revenue stations and in ranges	676	
Ditto coolie lines at Kaptai	41	
		1,705
Orissa Division—		
Construction guards' huts (7)	79	
Ditto cookshed and stable, Banpur Range head-quarters	12	
Repairs to buildings at sub-divisional head-quarters	269	
Ditto ditto in ranges	275	
		635
Total charges under A—VII*b*, "Buildings" ...		12,448

The charges for repairs amount to Rs. 6,503, and were exceptionally heavy in the Kurseong sub-division, where it was necessary to re-roof the sub-divisional bungalow, and in the Chittagong Division, where range houses had been allowed to fall into very bad repair.

104. In Kurseong Rs. 98 were expended on re-digging the well at the Sukna Range head-quarters, and Rs. 207 in Palamow in digging two wells, and clearing camping-grounds and compounds, on which latter account Rs. 4 were also expended in Singbhoom.

In the Sunderbuns Division the steamers *Seal* and *Cygnet*, and the barge, were repaired at the Kidderpore Dockyard at a cost of Rs. 1,386, Rs. 2,228 and Rs. 208, respectively. Station boats and dinghies were repaired at a total cost of Rs. 883; 11 new boats and one dinghy were purchased during the year for Rs. 5,355, and the dock at Shella creek was improved and completed at a cost of Rs. 314. The cost of draining, fencing, improving station compounds and coal depôts during the year was Rs. 80.

CHAPTER IV.—YIELD AND WORKING.

1.—Departmental Operations.

105. The following is a summary of these operations, showing the out-turn including confiscated, drift and waif wood and forest produce, compiled from forms Nos. 54 and 55:—

	Selection. fellings. C. ft. solid.	Clearances. C. ft. solid.	Thinnings. C. ft. solid.	Total wood. C. ft. solid.	Bamboos. No.	Minor forest produce. Mds.
Reserved forests—						
Timber	16,595	8,183	39,520	64,298	.....	.....
Fuel	16,807	27,153	239,246	283,206	.....	.....
Total ...	33,402	35,336	278,766	347,504	1,028,221	40
Protected forests—						
Timber	.....	20	.....	20	.....	.....
Fuel	.....	.....	.....	.....	.....	.....
Total ...	.....	20	.....	20	.....	8
Unclassed, &c., forests—						
Timber	8,837	5,458	.....	14,295	.....	.....
Fuel	.....	12,701	.....	12,701	.....	.....
Total ...	8,837	18,159	.....	26,996	.....	11
Grand Total { 1888-89 ...	42,239	53,515	278,766	374,520	1,028,221	59
Grand Total { 1887-88 ...	64,264	40,354	218,491	323,109	1,131,781	758
Difference in 1888-89 ... { More ...	.....	13,161	60,275	51,411	.....	.....
Difference in 1888-89 ... { Less ...	22,025	.....	.....	.....	103,560	699

The total out-turn of wood is made up of 78,613 cubic feet timber and 295,907 fuel, compared with 55,022 and 268,087 cubic feet respectively in 1887-88.

The increase in timber is chiefly due to thinnings having been undertaken in the Kurseong sub-division; otherwise departmental operations in timber have been still further curtailed in favour of those of purchasers than in the preceding year: the increase in fuel is almost entirely in the Darjeeling and Kurseong sub-divisions to keep pace with the public demand. The decrease in bamboos occurred in Palamow, Singbhoom, and Orissa, but chiefly in Palamow, where arrangements were again faulty; that in minor produce is due to operations in Singbhoom having been dropped.

106. *Direction Division.*—Under the drift operations on the Gunduck river which were carried out by Mr. A. Campbell, Officiating Deputy Conservator, Oudh Circle, with his usual energy, the Bengal share amounted to 2,266 cubic feet timber and 11,404 cubic feet fuel; the reduction in timber is understood to be due to continued obstruction met with in carrying out the work, chiefly by old established dealers on the river.

107. *Darjeeling sub-division.*—As regards timber, 346 cubic feet only were worked out, and fuel is represented by 254,687 cubic feet solid wood, against 241,432 cubic feet in the previous year, of which 99,645 cubic feet were converted into charcoal and 155,042 cubic feet into firewood.

The receipts in depôts were 79,203 maunds firewood and 11,452 maunds charcoal, and the sales, 74,414 maunds of the former and 10,384 maunds of the latter.

The demand for fuel for sale depôts was thus distributed as compared with the previous year:—

	Firewood.		Charcoal.	
	1887-88.	1888-89.	1887-88.	1888-89.
	Mds.	Mds.	Mds.	Mds.
Commissariat Department	55,000	55,000	...	190
Public Works ditto (Military)	105	324	110	182
Jail Department	...	1,410	...	...
Total, Public Departments ...	55,105	56,734	110	372
General Public ...	15,326	17,680	9,924	10,012
Total sales from sale depôts ...	70,431	74,414	10,034	10,384

The variations in demand are thus slight. Charcoal continued to be imported still more largely than in 1887-88 from Sikkim for sale in Darjeeling; 1,139 maunds firewood and 2,745 maunds charcoal were sold locally in the forests, and the quantity removed by purchasers from the forests on permits was only about two thirds of the previous year's demand.

The system of sales of firewood from depôts and in the forests by the cord and of charcoal from depôts by the bag was in force throughout the year, and is undoubtedly a sound one.

108. *Teesta sub-division.*—In timber 2,097 cubic feet were worked out, chiefly for departmental use, and 694 cubic feet were sold locally in the forests, as also 71 maunds firewood, 30 confiscated bamboos, and 35 maunds minor produce.

109. *Kurseong sub-division.*—The Department felled 38,282 cubic feet timber (of which 37,970 consisted of the out-turn of thinnings) and 16,800 cubic feet firewood, also chiefly obtained from thinnings. Local sales were effected of 36,819 cubic feet timber and 6,285 maunds firewood, also of 80 bamboos and 13 maunds seed.

110. *Julpigori sub-division.*—The out-turn of trees felled was 2,447 cubic feet, and 671 cubic feet dry and drift timber was collected, as also 4,550 cubic feet drift firewood. The receipts in depôts were 1,930 cubic feet sâl timber, which were sold to the Public Works Department, and 2,600 maunds firewood, of which 1,830 maunds were sold.

111. *Buxa sub-division.*—In timber 9,404 cubic feet was the out-turn of departmental operations in standing timber, and 160 cubic feet drift timber was also collected; 22 maunds of charcoal were made and sold from depôt. The sales of timber were from depôts, 4,188 cubic feet; and 1,279 cubic feet were sold locally.

112. *Palamow sub-division.*—Departmentally 964,936 bamboos were worked out, of which 841,075 were brought to sale depôts and 240,405 were sold.

113. *Hazaribagh sub-division.*—Silk cocoons, 1,400, were collected and sold.

114. *Singbhoom sub-division.*—Timber, 7,797 cubic feet, firewood, 7,639 cubic feet solid wood, 5,175 bamboos, and 20 maunds minor forest produce were brought out departmentally. The sales from depôts and locally were:—Timber, 9,831 cubic feet, fuel, 3,672 maunds; 10,092 bamboos, and 105 maunds minor produce.

115. *Sunderbuns Division.*—Timber, 3,812 cubic feet, fuel, 827 cubic feet, and 8 maunds minor produce were confiscated during the year. Sales from depôts were 4,141 cubic feet timber and 187 maunds firewood.

116. *Chittagong Division.*—Timber, 10,649 cubic feet, of which 8,837 cubic feet were the out-turn of drift, and the balance chiefly the result of thinnings, and 11 maunds of minor produce, were worked out by the Department: 9,826 cubic feet timber and 11 maunds produce were sold.

117. *Orissa Division.*—Timber, 682 cubic feet, and 58,000 bamboos were worked out from the reserved forests; 1,288 cubic feet timber were sold from depôts and 542 locally, and 8,000 bamboos were also sold from depôts.

2.—Removal of Produce by Purchasers.

118. The out-turn, including drift, &c., is shown in the following abstract from forms Nos. 54 and 55:—

	Selection fellings.	Clearances.	Thinnings.	Total wood.	Bamboos.	Minor forest produce.
	C. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid.	No.	Mds.,
Reserved forests—						
Timber	8,360,836	76,631	29,090	8,466,557	.....	.....
Fuel	9,873,976	332,519	636,107	10,842,602	.....	.....
Total ...	18,234,812	409,150	665,197	19,309,159	3,572,675	35,01,800
Protected forests—						
Timber	236,152	1,541	.....	237,693	.....	.....
Fuel	669,200	2,710,216	.....	3,379,416	.....	.....
Total ...	905,352	2,711,757	.....	3,617,109	101,109	12,49,249
Unclassed, &c. forests—						
Timber	285,902	9,560	.....	295,462	.....	.....
Fuel	70,523	107,182	.....	177,705	.....	.....
Total ...	356,425	116,742	.....	473,167	10,933,934	1,95,720
Grand Total ... 1888-89 ...	19,496,589	3,237,649	665,197	23,399,435	14,607,718	49,46,769
Grand Total ... 1887-88 ...	18,428,479	6 064,905	199,566	24,692,950	15,690,126	46,66,875
Difference in 1888-89 ... More ...	1,068,110	...	465,631	.....	.....	2,79,894
Difference in 1888-89 ... Less ...	.....	2,827,256	.....	1,293,515	1,082,408	... ..

119. The comparison of the out-turn for the two years shows an increase of 1,065,457 cubic feet in timber, and a decrease of 2,358,972 cubic feet in fuel.

As regards timber in the reserved forests, the increase is 1,215,236 cubic feet, which represents the larger demand on the Sunderbuns forests, the increase in all other Divisions being almost counterbalanced by the decrease in the Buxa and Hazaribagh sub-divisions; in the former purchasers held off owing to an alteration in the system of sales, whereby the actual quantity of timber sold has to be paid for instead of, as formerly, the cost being fixed by girth. Since the close of the year sales have been brisk. In the protected forests the decrease of 163,727 is due to purchasers having resorted to a greater extent than in the previous year to the reserved forests in the Sunderbuns Division, and the increase in unclassed forests of 13,948 cubic feet is due chiefly to the management of district forests in Singbhoom having been placed under the charge of the Department shortly before the close of the year.

As regards fuel, the out-turn of the reserved forests is 172,264 cubic feet less than in the previous year, due chiefly to fluctuation of demand in the Sunderbuns; the decrease of 2,291,501 cubic feet in the protected forests is due to rules in Khorda having been relaxed owing to the general scarcity in the Pooree district from scanty rainfall, and only the proportionate quantity as compared with the number of annual house-licenses actually paid for has been shown as removed by purchasers, the balance being recorded as free grants. The increase of 104,793 cubic feet under Unclassed forests is due to the new arrangements in Singbhoom above noticed.

120. As regards bamboos, the out-turn is 1,082,408 less than in 1887-88. The net decrease of 1,488,411 in the reserved forests is general in all divisions, except Darjeeling and Julpigori, where the demand was in excess of the previous year, and is chiefly in Chittagong, where the raids kept men from

going into the forests even to a greater extent than recorded in the last annual report, and in Orissa, where the relaxation of rules allowed the free use of bamboos from the protected forests, which resulted in a decrease in sales from those forests also of 141,991 bamboos. The fear of entering the more remote reserved forests in Chittagong resulted in the slight increase in sales from the unclassed forests of that Division of 547,994 bamboos.

121. In minor produce the estimated quantity removed by purchasers shows a net increase for the circle of 2,79,894 maunds. In the reserved forests the decrease in general produce is 4,90,533 maunds, which is more than accounted for in the results in the Sunderbuns Division, while the demand for fodder increased by 7,644 maunds in the Darjeeling Division. The protected forests show an increase of 7,38,135 maunds, due to fluctuations in demand chiefly for road metal in Orissa, and there was a small increase of 24,648 maunds in the unclassed forests in Singbhoom and Chittagong.

122. *Darjeeling sub-division.*—Removed by permit-holders :—Timber, 143,843 cubic feet ; fuel, 255,020 cubic feet wood ; total 398,863 cubic feet solid wood. Increase in timber, 51,612 cubic feet ; decrease in fuel, 95,041 cubic feet compared with the previous year, the latter due to imports of charcoal from Sikkim to meet the requirements of the station of Darjeeling. Revenue from bamboos and minor produce Rs. 269 and Rs. 1,107 (including divisional revenue from rubber), against Rs. 305 and Rs. 424 in 1887-88.

123. *Teesta sub-division.*—Removed by permit-holders :—Timber, 112,057 cubic feet ; fuel, 218,522 cubic feet ; total 330,579 cubic feet solid wood. Increase in timber, 24,400, and in fuel, 60,060 cubic feet. The receipts by sale of bamboos were Rs. 853 and from minor forest produce Rs. 400, showing a slight variation only from the previous year's revenue.

124. *Kurseong sub-division.*—Removed by permit-holders :—Timber, 170,392 cubic feet; fuel, 301,886 cubic feet ; total 472,278 cubic feet solid wood. Increase in timber, 1,899, and in fuel, 147,200 cubic feet. The demand for timber has thus been fully maintained and that for fuel has nearly doubled, and will undoubtedly further increase as the forests are made more accessible by the extension of roads. The revenue from bamboos was Rs. 1,892 and from minor produce Rs. 385, or about the same as in 1887-88.

125. *Julpigori sub-division.*—Removed by permit-holders :—Timber, 50,439 cubic feet ; fuel, 95,163 cubic feet ; total 145,602 cubic feet solid wood. Increase in timber 3,448, and in fuel, 15,628 cubic feet. The revenue from minor produce was Rs. 260, showing a small increase, and from bamboos Rs. 4.

126. *Buxa sub-division.*—Removed by permit-holders :—Timber, 17,922 cubic feet ; fuel, 7,161 cubic feet ; total 25,083 cubic feet solid wood, being a decrease in timber of 72,683 and an increase in fuel of 1,264 cubic feet ; the former is due to purchasers having held back for reasons explained above. The revenue from bamboos and minor produce was Rs. 17 and Rs. 213, respectively, compared with Rs. 11 and Rs. 132 in the previous year.

127. *Palamow sub-division.*—The number of bamboos sold fell further from 32,447 to 12,075 ; the falling off is said to be due to purchasers not having been granted permits on the Betlah forest during the year, as it has been decided to work that forest departmentally only, so as to foster its resources. The revenue from minor produce increased from Rs. 140 to Rs. 179, and 448 cubic feet firewood were taken on permit.

128. *Hazaribagh sub-division.*—In timber 555 cubic feet dry wood and 7,406 cubic feet firewood were the sales to permit-holders, the previous year's figures being 2,484 and 4,434 cubic feet respectively. The revenue from bamboos and minor produce rose from Rs. 276 and Rs. 812 to Rs. 382 and Rs. 1,273 ; of the latter amount Rs. 794 were received for mica.

129. *Singbhoom sub-division, Reserved forests.*—The demand increased considerably, but not to the extent anticipated, as the Bengal-Nagpore Railway authorities being able to obtain what they required from private forests at purely nominal rates, naturally preferred to resort to those forests, rather than pay the very low rate of Rs. 10 per sâl tree at present fixed for the reserves. In timber 31,120 cubic feet and in fuel 53,144 cubic feet wood were removed by purchasers, the previous year's figures having been 3,147 and 35,074 cubic feet respectively. The revenue from bamboos was Rs. 146 and from minor produce Rs. 378, against Rs. 158 and Rs. 254 in 1887-88.

130. *Singbhoom sub-division, Unclassed, &c., Forests.*—From these forests, the management of which was made over to the Department near the close of the year, 10,910 cubic feet timber and 107,182 cubic feet fuel were removed by permit-holders, and also 523 maunds minor produce, for which Rs. 10 were realised.

131. *Sunderbuns Division, Reserved Forests.*—The demand by permit-holders compares as follows with the previous year's figures :—

		Timber. C. ft.	Firewood. C. ft.	Minor produce Mds.
1888-89		7,936,460	9,873,976	32,16,270
1887-88		6,758,274	10,187,821	37,86,292
In 1888-89 ...	More	1,178,186	.....	.....
	Less	.....	313,845	5,70,022

Of the firewood removed, 3,971,016 cubic feet were of sundri, compared with 3,713,810 cubic feet in 1887-88, so that the decrease in firewood of other kinds removed was 571,051 cubic feet. In minor produce there was a large decrease in golpatta and shells, and also a decrease in hental and cane, but the demand for null nearly doubled (it rose from 47,936 to 93,824 maunds) and the revenue from wax and honey increased from Rs. 3,610 to Rs. 5,031. Right-of-way passes were issued for 2,716 boats against 2,424 in the previous year, and four boats were registered.

132. *Sunderbuns Division, Protected Forests.*—Timber, &c., removed compares as follows with the figures of 1887-88 :—

		Timber. C. ft.	Firewood. C. ft.	Minor produce. Mds.
1888-89		236,152	669,200	288,782
1887-88		400,094	268,326	253,028
In 1888-89	More	.....	400,874	35,754
	Less	163,942	.....	.....

As regards timber, the reserved forests were more resorted to than in previous years. Of the firewood removed, 30,576 cubic feet were of sundri, compared with 8,706 in 1877-88; in minor produce the increase was chiefly in golpatta, and the revenue from wax and honey was Rs. 1,575. The number of right-of-way passes increased from 451 to 973, and of boats registered from 6 to 33.

133. *Chittagong Division, Reserved Forests.*—Removed by permit-holders :—Timber, 1,299 cubic feet against 883 in the previous year; bamboos, 2,487,474 against 3,208,557; minor produce, 5,476 maunds against 10,505 maunds. That the falling off in bamboos is due to the fear of raiders having deterred men from entering the more remote forests is indicated by the fact that the number removed from the Sitapahar reserve is 1,360,585 compared with 853,480 in the previous year; this being the only reserved forest situated at a considerable distance from the frontier. There was a general falling off in minor produce of all classes due to the same cause.

134. *Chittagong Division, Unclassed, &c., Forests.*—Timber removed further increased from 281,514 to 284,552 cubic feet, and firewood decreased again from 72,912 to 70,523 cubic feet. Under bamboos there is an increase from 10,385,940 to 10,933,934, and also under minor produce from 171,072 to 195,197 maunds.

The revenue from bamboos and from minor produce, after deducting the Maharaja of Hill Tipperah's share, is Rs. 24,866 and Rs. 8,343 respectively, compared with Rs. 23,202 and Rs. 7,592 in 1887-88.

135. *Orissa Division, Reserved Forests.*—Removed by permit-holders :—Timber, 1,470 cubic feet; fuel 29,876 cubic feet; total 31,346 cubic feet, compared with 39,172 removed in 1887-88; decrease due to relaxation of rules owing to scarcity of food-crops: for the same reason the number of bamboos paid for fell from 1,393,673 to 559,523. Minor produce shows an increase from 15,007 to 111,848 maunds, owing to laterite having been taken from reserved forests during the year for road works.

136. *Orissa Division, Protected Forests.*—The quantity of timber taken by permit-holders increased from 1,326 to 1,541 cubic feet; firewood taken on payment fell from 5,402,591 to 2,710,216 cubic feet, and bamboos from 243,100 to 101,109 owing to the rules having been relaxed, and the increase in minor

produce from 258,086 to 960,467 maunds was due to increased demand for road metal.

3.—Free Grants of Forest Produce.

137. The free grants for the year, abstracted from forms Nos. 54 and 55, are thus classified:—

		Timber.	Fuel.	Total wood.	Bamboos.	Minor produce.
		C. ft. solid.	C. ft. solid.	C. ft. solid.	No.	Mds.
Reserved forests		15,401	1,001,321	1,016,722	1,200	5,165
Protected forests		2,659	3,000,168	3,002,827	3,780,410	38,05,045
Unclassed, &c., forests		.....	.....	.....	.....	.....
Total	1888-89 ...	18,060	4,001,489	4,019,549	3,781,610	38,10,210
	1887-88 ...	25,138	1,000,000	1,025,138	298,800	16,45,950
Difference in 1888-89 ...	More ...	.....	3,001,489	2,994,411	3,482,810	21,64,260
	Less ...	7,078	.....	.....	.....	.....

138. The free grants are thus distributed:—Timber, 18,060 cubic feet; approximate value, Rs. 6,000. From the reserved forests:—Darjeeling sub-division, 1,500 cubic feet to the Deputy Commissioner for use in repairs to frontier bungalows; Kurseong sub-division, 270 cubic feet for repairs to new road through Manjha forest; Buxa sub-division, 3,289 cubic feet, chiefly to villagers for assistance rendered in supplying labour; Singbhoom sub-division, 10,280 cubic feet to residents in 220 privileged villages near Saitba forest; Orissa Division, 62 cubic feet to Government ryots of Khorda who were too poor to pay for the same for use in rebuilding their houses. From the protected forests:—2,659 cubic feet to Government ryots of Khorda in Orissa, for the same reasons as are given above.

Fuel, 4,001,489 cubic feet solid wood; estimated value, Rs. 10,000. From the reserved forests:—Singbhoom sub-division, 1,000,000 cubic feet to the 220 Saitba privileged villages; Orissa Division, 1,321 cubic feet to Government ryots in Khorda. From the protected forests, 3,000,168 cubic feet removed by Khorda ryots in Orissa under the relaxed rules owing to scarcity of crops.

Bamboos, 3,781,610; estimated value, Rs. 7,092. From the reserved forests in Khorda 1,200 were given to Government ryots, and from the protected forests in the Orissa Division 3,780,410 to the same, taken chiefly for sale and partly without payment under their annual house-licenses for their own use.

Minor produce, 38,10,210 maunds; estimated value, Rs. 89,210. From the reserved forests:—Darjeeling sub-division, 21 maunds fodder free to Military Department; Buxa sub-division, 1,637 maunds grass and 61 maunds cane to villagers; Chittagong Division, 2,000 maunds sun grass for departmental use; Orissa Division, 6 maunds iron ore and 1,440 maunds fruits to ryots on the Khorda estate. From the protected forests in Khorda 37,80,250 maunds of thorns and brushwood and 24,795 maunds laterite, &c., were also granted free to Government ryots.

139. Grazing concessions, aggregating in estimated value Rs. 1,03,026, were also allowed under Government orders in the Teesta sub-division and in the Khorda sub-division.

140. The aggregate estimated value of all free grants and concessions in all forests for the year is Rs. 2,15,328.

4.—Summary of Produce removed from the Forests.

141. The following is a summary of the total out-turn of the year, including consficated, &c., wood and produce, compiled from the abstracts at foot of forms Nos. 54 and 55, compared with the figures of 1887-88:—

Class of Forest, and of agency employed.	Timber.		Fuel.		Bamboos.		Minor forest produce.	
	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.
Reserved Forests.	C. ft. wood.	C. ft. wood.	C. ft. wood.	C. ft. wood.	No.	No.	Mds.	Mds.
By Government agency	64,298	41,909	283,206	255,575	1,028,221	1,131,201	40	758
„ Purchasers	8,466,557	7,251,321	10,842,602	11,014,866	3,572,675	5,061,086	35,01,800	39,84,689
„ Free grants	15,401	23,778	1,001,321	1,000,000	1,200	4,000	5,165	688
„ Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Tota ...	8,546,256	7,317,008	12,127,129	12,270,441	4,602,096	6,196,287	35,07,005	39,86,135

Class of Forest, and of agency employed.	Timber.		Fuel.		Bamboos.		Minor forest produce.	
	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.
Protected Forests.	C. ft. wood.	C. ft. wood.	C. ft. wood.	C. ft. wood.	No.	No.	Mds.	Mds.
By Government agency	20	.....	.....	.....	.....	.....	8	.....
,, Purchasers	237,693	401,420	3,379,416	5,670,917	101,109	243,100	12,49,249	511,114
,, Free grants	2,659	560	3,000,168	.....	3,780,410	294,800	38,05,045	16,45,262
,, Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	240,372	401,980	6,379,584	5,670,917	3,881,519	537,900	50,54,302	21,56,376
Unclassed State Forests and Waste Lands.								
By Government agency	14,295	13,113	12,701	12,512	...	580	11	.....
,, Purchasers...	295,462	281,514	177,705	72,912	10,933,934	10,385,940	1,95,720	1,71,072
,, Free grants	.....	800	.....	.....	.....	.....	.....	.....
,, Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	309,757	295,427	190,406	85,424	10,933,934	10,386,520	1,95,731	1,71,072
Grand total out-turn ...	9,096,385	8,014,415	18,697,119	18,026,782	19,417,549	17,120,707	87,57,038	63,13,583
In 1888-89 { Increase	1,081,970	.....	670,337	.....	2,296,842	.....	24,43,455	.....
In 1888-89 { Decrease	.....	.....	.....	.....	.....	.....	.....	.....

The out-turn of wood was 27,793,504 cubic feet solid, against 26,041,197 in the previous year; that is an increase of 1,752,307 cubic feet compared with 1887-88. This difference, and the variation in the out-turn in bamboos and minor forest produce, has been explained in the preceding sections of this chapter.

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CHAPTER V.—FINANCIAL RESULTS.

142. The financial results of the last five years compare as follows:—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1884-85	5,71,152	4,11,915	1,59,237
1885-86	5,97,432	3,70,399	2,27,033
1886-87	6,53,634	4,22,781	2,30,853
1887-88	6,57,794	3,90,368	2,67,426
1888-89	6,76,907	3,68,169	3,08,738

The improvement on the previous year in surplus is Rs. 41,312, the receipts being Rs. 19,113 greater, and the charges Rs. 22,199 less, than in 1887-88.

143. In receipts the following divisions show better results by the sums quoted than in the preceding year:—Darjeeling, Rs. 5,816; Sunderbuns, Rs. 38,975; Chittagong, Rs. 4,881: and the following worse:—Direction, Rs. 809; Julpigori, Rs. 15,401; Chota Nagpore, Rs. 513; Orissa, Rs. 13,836. The latter results are due—under Direction, to smaller receipts on the Gunduck river, owing chiefly to difficulties which it is hoped the revised drift rules have rectified; under Julpigori, to continued holding back from departmental operations in the Buxa sub-division pending the results of the Inspector-General's visit, the demand from sale depôts also being much less than in 1887-88; under Chota Nagpore, receipts in the Hazaribagh and Singbhoom sub-divisions more than doubled, but departmental bamboo operations in Palamow were sadly mismanaged; in Orissa, owing to scarcity, the bulk of the forests were open to the public, not only to meet their own personal requirements in produce, but also for the removal of fuel, &c., for sale, thereby undoubtedly saving Government from cash expenditure on local relief to a considerable extent.

144. In charges the decrease of Rs. 22,199 is made up of Rs. 15,477 under "A—Conservancy and Works" and of Rs. 6,722 under "B—Establishments." The decrease under the former head was about proportionately general under all the minor heads, except III, where expenditure increased by Rs. 1,163 on Gunduck and Julpigori drift operations, and VI, where the net decrease is Rs. 719, but charges in the Sunderbuns were in excess of the previous year by Rs. 3,903 owing to purchase of more serviceable boats for revenue stations; while under IX there is a decrease of Rs. 2,983, owing chiefly to debits of irrecoverable advances for construction of houses in the Sunderbuns having been made, in the accounts for 1887-88, to "Other charges." There was again a decrease under all heads of "B—Establishments," due, as in the

preceding year, chiefly to the absence of gazetted officers on leave, and to a reduction of Rs. 1,494 in charges for "deputation and special allowances."

The value of timber in sale depôts and of stores, as recorded in form No. 57, shows a net difference of Rs. 15,582 in favour of the year.

145. The distribution of receipts and charges under main heads, abstracted from form No. 62, is as follows:—

	Departmental Operations.	Other Revenue.	Formation, Protection and Improvement of Forests.	Total.
	Rs.	Rs.	Rs.	Rs.
Receipts	63,498	6,13,409	.....	6,76,907
Charges	56,162	1,45,065	1,66,942	3,68,169
Surplus	7,336	4,68,344	.....	3,08,738
Deficit	... "	.....	1,66,942	.....

Under *Departmental Operations* there was a surplus in all divisions, except Chota Nagpore and Orissa; as regards the Chota Nagpore Division the deficit under this head is due to bamboo works in Palamow having been mismanaged, and in Orissa to small demand on depôts owing to relaxation of rules having enabled supplies to be obtained practically for the cost of extraction.

The surplus under *Other Revenue* is Rs. 45,833 greater than in the preceding year, the improvement being in all divisions, except under Gunduck drift operations and in Orissa, where the year was a bad one, from a revenue point of view, for the reasons given above. The main increase in surplus under this head is in the Sunderbuns, where the improvement is Rs. 36,750, while in Darjeeling it is Rs. 8,841; in Chittagong, Rs. 5,687; in Julpigori, Rs. 3,105, and in Chota Nagpore, Rs. 1,131.

Under *Formation, Protection and Improvement of Forests*, the expenditure is Rs. 12,811 under that of 1887-88; the reduction is general in all divisions, except Sunderbuns and Orissa; the increase in the Sunderbuns of Rs. 1,020 is due to the taking to this head of a proportionate amount of the expenditure on boats, and in Orissa Rs. 1,584 to increased expenditure on fire protection, with greatly improved results.

CHAPTER VI.—GENERAL REMARKS.

146. Appendix D contains remarks regarding the services of gazetted officers.

Form No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1888-89.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Darjeeling Sub-division.	Senchal	Darjeeling district.	Rinchintong Dhara, north block	17	5	...	...	3,389	5		
			Ditto, south do.	38							
			Rangnu block ...	500							
			Senchal do. ...	517							
			Dooteria do. ...	534							
			Rangbul do. ...	650							
			Sonada do. ...	665							
			Pachim do. ...	468							
	Mahalderam ...	Ditto ..	Chattakpur do. ...	875	7	...	...	4,136	7		
			Sepoydura do. ...	1,145							
			Mamrim do. ...	1,216							
			Sureil do. ...	900							
	Tukdah	Ditto ...	Rangirum do. ...	500	12	...	...	7,509	12		
			Dawaipani do. ...	857							
			Rungjo do. ...	1,100							
			Tiger Hill do. ...	755							
			Rangbi do. ...	1,037							
			Rishap do. ...	1,062							
			Poomong do. ...	470							
			Hoom do. ...	1,060							
			Tukdah do. ...	668							
	Goompahar ...	Ditto ...	Goom do. ...	600	14	...	...	9,245	14		
			Nai do. ...	839							
			Rishihat do. ...	835							
			Tungsong do. ...	653							
			Poobong do. ...	614							
			Balasan do. ...	811							
			Chongtong do. ...	1,047							
			Permaigiri do. ...	1,284							
			Palongdong do. ...	931							
			Pograinbong do. ...	960							
			Rungbong do. ...	671							
	Singalila	Ditto ...	Little Rangit do. ...	2,087	64	.	...	41,254	64		
			Tonglu do. ...	1,993							
			Rilling do. ...	1,871							
			Salambong do. ...	2,600							
			Kankibong do. ..	2,789							
			Rithu do. ...	3,465							
			South Rimbick do. ...	4,126							
			North ditto, do. ...	3,191							
			Sandukpho do. ...	3,560							
			Siri do. ...	3,857							
			Rumman do. ...	2,603							
			Suburkam do. ...	5,495							
			Phalut do. ...	3,617							
			Total ...	65,533	102	..	...	65,533	102		
Teesta Sub-division.	West Teesta	Ditto ...	Rangit forest—								
			Badamtam block ...	569	6						
			Sumbong do. ...	1,741							
			Seem do. ...	342							
			Pashok do. ...	1,011							
			Mangwa forest	995	1½						
			Raiang do.—								
			Rangnu block ...	1,265	6						
			Raiang do. ...	1,697							
			Berrik do. ...	1,122							
			Sitong forest—								
			Kundong block ...	1,403	10	...	...	21,822	34		
			Sitikhola do. ..	1,472							
			Numbong do. ...	1,547							
			Sitong do. ...	1,994							
			Sivoke Hills forest—								
			Andera block ...	1,179	10½						
			Ruyem do. ...	1,091							
			Chawa do. ...	1,655							
			Gola do. ...	1,376							
			Upper Ghoramara do. ...	1,363							
	East Teesta ...	Ditto ...	Rilli forest—								
			Ponbu block ...	1,650	8						
			Gooling do. ...	885							
			Nazzeokh do. ...	1,786							
			Tunang do. ...	966							
			Kalimpong forest—								
			Comesee block ...	1,364	11½						
			Rinkinpung do. ...	1,552							
			Tashiding do. ...	1,254							
			Mongbur do. ...	1,382							
			Balukop do. ...	1,798							
			Dumsong forest—								
			Sungseer block ...	2,983	22	...	...	40,738	64		
			Manachu do. ...	2,424							
			Rangpo do. ...	1,871							
			Kashyem do. ...	2,471							
			Eecha do. ...	2,645							
			Dumsong do. ...	1,638							
			Rissoom forest—								
			Paiengaon block ...	1,110	9						
			Mayrong do. ...	1,280							
			Rissoon do. ...	484							
			Paktham do. ...	1,620							
			Khempong do. ...	1,336							
			Loolagaon forest—								
			Siehoor block ...	1,725	13						
			Kuffeer do. ...	1,456							
			Loolagaon do. ...	1,530							
			Pemling do. ...	1,225							
			Bokhim do. ...	1,050							
			Chumung do. ...	1,253							

FORM No 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1888-89—continued.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Teesta Sub-division—*concluded.*	Pankasari ...	Darjeeling district ...	Pankasari forest—								
			Kolbong block ...	2,396	16	...	...	65,152	102		
			Rushetti do. ...	1,788							
			Labah do. ...	2,031							
			Pankasari do. ...	3,594							
			Rhenock forest	3,225	5						
			Rechi La forest—								
			Rechi La block ...	4,295	17						
			Thosum do. ...	2,967							
			Rooka do. ...	3,382							
			Mo forest	4,453	7						
			Jaldaka forest—								
			Cheechu block ...	2,304	23						
			Paren do. ...	3,380							
			Rongo do. ...	4,590							
			Khumani do. ...	4,600							
			Nar forest—								
			East Nar block ...	4,600	15½						
			West do. do. ...	5,493							
			Dalingkot forest—								
			Ambiok block ...	1,225	10						
			Dalingkot do. ...	2,166							
			Suckam do. ...	3,170							
			Mal forest	5,493	8½						
	Chel	Ditto ...	Mungpong forest ...	6,230	10	...	...	32,120	50		
			Leesh do. ...	4,287	7						
			Geesh forest—								
			Churonthi block ...	4,801	21						
			Ramthik do. ...	3,649							
			Lehti do. ...	5,280							
			Noam forest—								
			Noam block ...	3,705	12						
			Pugo do. ...	4,168							
			Total ...	159,832	250	...	...	159,832	250		
Kurseong Sub-division.	Kurseong	Ditto ...	Dhobijhora forest	589	1	...	...	2,872	5		
			Babukhola forest—								
			Babukhola block ...	1,320	3						
			Majua do. ...	520							
			Sioakhola forest ...	408	1						
			Paglajhora do. ...	35	...						
	Balasan	Ditto ...	Manjua forest ...	1,112	2	...	1	...	...	7th Dec. 1888	Actual area 1·4 acres excluded from 1st April 1888.
			Koohein do. ...	514	1						
			Manjha forest—								
			Khairbani block ...	1,984	6						
			Lohaguri do. ...	584							
			Manjha do. ...	1,511							
			Mechi forest—								
			Upper Mechi block ...	236	5						
			Central do. do. ...	504							
			Lower do. do. ...	865							
			Nipania do. ...	473							
			Kolabari do. ...	494							
			Gurabadi do. ...	528							
			Surjbur do. ...	52							
			Balasan forest—								
			Balasan block ...	671	3						
			Tarabari do. ...	1,090							
	Terai	Ditto ...	Tukriajhar forest	1,364	2	...	...	9,784	15		
			Dalkajhar forest—								
			Khadma block ...	250	9						
			Taipu do. ...	430							
			Dalka do. ...	664							
			Central do. ...	590							
			Danhara do. ...	656							
			Bengdubi do. ...	660							
			Moolta do. ...	431							
			Lalfa do. ...	622							
			Rishabari do. ...	682							
			Bagdogra do. ...	526							
			Harlia do. ...	309							
			Pantapari forest—								
			Pantapari block ...	755	4						
			Boiranti do. ...	484							
			Tirihanna do. ...	489							
			Latua do. ...	249							
			Borobhita do. ...	623							
	Bamonpokri ...	Ditto ...	Bamonpokri forest	1,372	3	...	...	2,055	3		
			Rakti do.	195							
			Lamagumba do.	488							
	Sukna	Ditto ...	Sukna forest—								
			Sukna block ...	1,262	7	...	...	8,886	14		
			Kuklong do. ...	881							
			Chamta do. ...	516							
			Adalpur do. ...	422							
			Kynanuka do. ...	498							
			Rungdung do. ...	774							
			Mahanadi forest—								
			Pundig block ...	2,156	7						
			Mahanadi do. ...	654							
			Mohurgong do. ...	718							
			Hattisarra do. ...	544							
			Panchanai do. ...	461							

FORM No. 49.

FOREST DEPARTMENT, BENGAL

Area of Reserved Forests, 1888-89—continued.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kurseong Sub-division—*concld.*	Champasari ...	Darjeeling district ...	Champasari forest—								
			Gulma block ...	469	5	...	...	21,325	33		
			Singimari do. ...	824							
			Upper Champasari do. ...	1,085							
			Lower ditto do. ...	685							
			Choklong forest—								
			Lower Ghoramara block ...	2,494	16						
			Gulma Valley do. ...	1,670							
			Choklong do. ...	2,080							
			Jogijhora do. ...	1,287							
			Kuhil do. ...	1,326							
			Bandarjhola do. ...	1,287							
			Latpanchor forest—								
			Mana block ...	2,302	5						
			Latpanchor do. ...	1,193							
			Sivoke forest—								
			Janaikuri block ...	1,338	7						
			Samardanga do. ...	861							
			Sivoke, north do. ...	644							
			Do., east do. ...	690							
			Do., west do. ...	686							
			Shilibhita do. ...	404							
			Total ...	55,541	87	..	1	55,539	87		
Julpigori Sub-division.	Apalchand ...	Julpigori district ...	Apalchand forest—								
			Guzliduba block ...	8,312	30	...	...	18,861	30		
			Rajadanga do. ...	6,986							
			Chengimari do. ...	3,200							
			Malhati do. ...	310							
			Kyranti do. ...	53							
	Tondu	Ditto ...	Tondu forest—								
			North Tondu block ...	7,740	85	...	...	54,460	85		
			Upper do. do. ...	21,480							
			Lower do. do. ...	25,240							
	Muraghat	Ditto ...	Dainah forest ...	15,360	24	...	...	31,003	48		
			Muraghat do. ...	10,880	17						
			Rehti do. ...	2,923	4						
			Goshaihat do. ...	1,840	3						
	Falakata	Ditto ...	Dulgaon forest ...	1,375	2	...	...	14,019	22		
			Dumchi do. ...	3,062	5						
			Khairbari do. ...	1,775	3						
			Teeti do. ...	7,795	12						
			Salbari do. ...	12	...						
			Total ...	118,343	185	.	..	118,343	185		
Buxa Sub-division.	Borojhar	Ditto ...	Borojhar forest ...	35,200	55	...	...	44,100	69		
			Butri do. ...	1,400	2						
			Gabur Basra do. ...	6,400	10						
			Salkuer do. ...	1,100	2						
	Buxa	Ditto ...	Buxa forest—								
			Raimatong block ...	5,136	145	...	...	92,507	145		
			Poro do. ...	16,000							
			Rajabhatkawa do. ...	30,091							
			Panbari do. ...	21,120							
			Hill forests do. ...	20,160							
	Haldibari	Ditto ...	Raidak forest ...	12,800	20	...	...	32,640	51		
			Dhumpara do. ...	7,040	11						
			Bholka do. ...	12,800	20						
			Mahakalguri do. ...	215	...	...	215	...	...	6th June 1888	Excluded from 6th June 1888.
			Total ...	169,462	265	...	215	169,247	265		
Palamow Sub-division.	Betla	Lohardugga district ..	Kechki forest ...	440	21	...	...	13,687	21		
			Betlah do. ...	6,847							
			Kedh block, Saidope do. ...	6,400							
	Saidope	Ditto ...	Saidope do. ...	21,120	33	...	...	21,120	33		
	Ramundag ...	Ditto ...	Tungari do. ...	5,715	26	...	...	16,595	26		
			Ramundag do. ...	10,880							
	Kumandi	Ditto ...	Kumandi do. ...	8,960	19	...	...	12,036	19		
			Chatum do. ...	855							
			Peeree do. ...	1,523							
			Ooreeya do. ...	698							
	Southern	Ditto ...	Seemah do. ...	26,240	89	...	...	56,951	89		
			Barasand do. ...	30,711							
			Total ...	120,389	188	...	...	120,389	188		
Hazaribagh Sub-division.	Ranchi	Lohardugga district.	Horhap forest ...	...	...	1,098	...	1,098	2	.....	Transfer from Singbhoom sub-division from 1st April 1888.
	Koderma	Hazaribagh district.	Koderma do. ...	29,767	47	...	...	29,767	46		
			Total ...	29,767	47	1,098	...	30,865	48		
Singbhoom Sub-division.	Ranchi	Lohardugga district.	Horhap forest ...	1,098	2	...	1,098	...	...	.....	Transfer to Hazaribagh sub-division.
	Saranda	Singbhoom district.	Saranda do. ...	199,740	312	1,370	...	201,110	314	13th November 1888.	Declared to be reserved forest from 1st October 1888.
	Chyebassa ...	Ditto ...	Saitba do. ...	18,560	101	...	...	64,640	101		
			Santara do. ...	46,080							
	Kolhan	Ditto ...	Latua do. ...	44,800	108	...	...	69,120	108		
			Leda do. ...	24,320							
			Total ...	334,598	523	1,370	1,098	334,870	523		

Form No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1888-89—(concluded).

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Sunderbuns Division.	Satkhira	Khulna district.	Satkhira forest ...	244,480	382	...	...	244,480	382		
	Khulna		Khulna do. ...	447,353	699	...	...	447,353	699		
	Bagirhat		Bagirhat do. ...	320,000	500	...	...	320,000	500		
			Total ...	1,011,833	1,581	...	...	1,011,833	1,581		
Chittagong Division.	Kassalong	Chittagong Hill Tracts	Kassalong forest ...	488,320	763	...	...	488,320	763		
	Sitapahar		Sitapahar do. ...	7,020	11	...	...	7,020	11		
	Matamori		Matamori do. ...	160,640	251	...	...	160,640	251		
	Sungoo		Sungoo do. ...	93,190	145	...	...	93,190	145		
	Rinkheong ...		Rinkheong do. ...	137,570	215	...	...	137,570	215		
			Total ...	886,740	1,385	...	...	886,740	1,385		
Orissa Division, Angul Sub-division.	Tikarpara	Tributary Mehals of Orissa.	Tikarpara forest	103,040	161	...	...	103,040	161		
	Bagmunda ...	Ditto ...	Bagmunda do.	40,960	64	...	...	40,960	64		
	Durgapur	Ditto ...	Durgapur forest—								
			Durgapur block ...	8,320	55	...	...	35,200	55		
			Tabada do. ...	2,720							
			Wontullia do. ...	2,400							
			Kotoda do. ...	6,720							
			Simlipoda do. ...	9,920							
			Konoloi do. ...	5,120							
			Total, Angul Sub-division ...	179,200	280	...	...	179,200	280		
Khorda Sub-division.	Dandimal... ...	Pooree district.	Dandimal forest—								
			Churang block ...	1,330	44	...	...	28,329	44		
			Chandka do. ...	8,240							
			Barhapita do., I ...	9,080							
			Ditto do., II ...	1,920							
			Haripur do. ...	941							
			Jamjhari do. ...	300							
			Majana do. ...	435							
			Bhola do. ...	283							
			Daspur do. ...	452							
			Bharatpur do. ...	2,952							
			Rampur do. ...	1,125							
			Mendhasal do. ...	815							
			Bhagbatipur forest ...	456							
	Khorda	Ditto ...	Khorda forest—								
			Barunai Hill block ...	1,200	8	...	...	4,814	8		
			Panchgarh do. ...	1,760							
			Dandimal forest—								
			Jaimangal block ...	356							
			Nagapati do. ...	1,498							
	Banpur	Ditto ...	Banpur forest—								
			Arang block ...	6,840	32	...	...	20,601	32		
			Tamna do. ...	8,280							
			Katual do. ...	2,361							
			Bankar do. ...	3,120							
	Kuhuri	Ditto ...	Kuhuri forest— do. ...								
			Kuhuri block ...	2,120	10	...	...	6,400	10		
			Sulia do. ...	4,280							
			Total, Khorda Sub-division ...	60,144	94	...	...	60,144	94		
			Total, Orissa Division ...	239,344	374	...	...	239,344	374		
			Grand Total ...	3,191,381	4,987	2,468	1,314	3,192,535	4,988		

Form No. 49A.

FOREST DEPARTMENT, BENGAL.

Area of Protected Forests, 1888-89.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Sunderbuns.	Diamond Harbour	24-Pergunnahs district.	Diamond Harbour forest ...	334,965	523	10,725	4,959	340,731	533	12th April 1888 1st Aug. „ 18th Sept. „ 23rd Jan. 1889	Added from 12th April 1888.
	Basirhat	Ditto ...	Baripore do. ...	208,000	325	...	2,314	205,686	321		Areas excluded transferred to Civil authorities from 12th April 1888.
	Satkhira	Khulna district	Basirhat do. ...	647,270	1,011	...	...	647,270	1,011		
	Khulna	Ditto ...	Satkhira do. ...	15,300	24	...	...	15,300	24		
			Khulna do. ...	30,407	48	...	...	30,407	48		
			Total ...	1,235,942	1,931	10,725	7,273	1,239,394	1,937		
Orissa.	Dandimal	Pooree district.	Dandimal forest ...	28,093	44	20,569	...	48,662	76	.....	Areas corrected by Settlement Officer, Khorda.
	Khorda		Khorda do. ...	83,297	130	...	396	82,901	130		
	Banpur		Banpur do. ...	43,612	68	18,075	...	61,687	96		
	Kuhuri		Kuhuri do. ...	10,218	16	6,400	...	16,618	26		
			Total ...	165,220	258	45,044	396	209,868	328		
			Grand Total ...	1,401,162	2,189	55,769	7,669	1,449,262	2,265		

Form No. 49B.

FOREST DEPARTMENT, BENGAL.

Unclassed State Forests and Waste Lands, 1888-89.

Chittagong Division ...	Chittagong Hill Tracts.	Hill Tracts	2,581,420	4,033	...	...	2,581,420	4,033	
		Total ...	2,581,420	4,033	...	...	2,581,420	4,033	

Form No. 50.

FOREST DEPARTMENT, BENGAL.

Register of breaches of Forest Rules during 1888-89.

PROSECUTIONS IN THE COURTS OF LAW.

Forest Division and Civil Districts.	Cases pending from 1887-88.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Darjeeling district—														
Darjeeling sub-division	1		43	31	12	86	87	75	125	12	17	87	142	..
Teesta ditto			2	4		6	6	6	8	...		6	8	
Kurseong ditto ...	* ..		6	4	1	11	11	11	16		...	11	16	..
Julpigori district—														
Julpigori sub-division		2	2	...	...	4	4	3	5	1	1	4	6	.
Buxa ditto		2	...	.	...	2	2	...	...	2	2	2	2	
Lohardugga district—														
Palamow sub division ...	...	3		...		3	3	3	3	...	..	3	3	
Hazaribagh district—														
Hazaribagh sub-division ..	..		1	..	..	1	1	1	1	.	..	1	1	
Singbhoom district—														
Singbhoom sub-division ...	† ..	7	9		...	16	16	12	26	4	52	16	78	
Barisal district—														
Sunderbuns sub-division	.	...		.	1	1	1	1	3		...	1	3	
Khoolna district—														
Sunderbuns Division	...		5	...	30	35	35	29	51	6	6	35	57	...
24 Pergunnahs district—														
Sunderbuns Division .	1	...	2	...	31	33	34	31	62	3	3	34	65	.
Chittagong district—														
Chittagong Division ..	3			.	5	5	8	4	5	4	13	8	18	
Chittagong Hill Tracts—														
Chittagong Division	2		...	...	4	4	6	3	4	1	6	4	10	2
Orissa Tributary Mehals—														
Angul sub-division ...	2	5	1	4	1	11	13	9	14	3	13	12	27	1
Pooree district—														
Khorda sub-division ...		2	20	8	6	36	36	19	44	17	34	36	78	.
Total ..	9	21	91	51	91	254	263	207	367	53	147	260	514	3

* Two cases were shown erroneously in this form for 1887 88 as pending at close of year under Kurseong sub division.
† One case shown in last year's statement as pending in Singbhoom sub-division has been written off, as it has since been discovered that the offence charged was committed on a disputed boundary.

Form No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1889, *to accompany Report for* 1888-89.

Divisions and Sub divisions.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1888.	During dry season of 1889.			Cost during the season up to 31st May 1889.	Remarks.
				Area attempted to be protected.	Failures	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
	I—Areas protected by isolation and other special measures.							
Teesta Sub-division (Darjeeling Division).	West Teesta Range—							
	Rangit forest	1881-82	3,663	3,663	... .	3,663	124	
	Mankwa do.	1881-82	995	995	..	995	54	
	Raiang do.	1885-86	4,084	4,084	19	4,065	73	
	Sitong do.	1879-80	6,416	6,416	.	6,416	42	
	Sivoke Hills do. ...	1879-80	6,664	6,664	...	6,664	47	
	East Teesta Range (part)—							
	Rilli forest	1879 80	5,287	5 287	.	5,287	110	
	Kalimpong do. .	1885-86	7,350	7,350	...	7,350	187	
	Pankasari Range (part)—							
	Jaldaka forest	1881-82	14,874	14,874	...	14,874	49	
	Nar do.	1881-82	10,093	10,093	...	10,093	55	
	Daling Kot do.	1881-82	6,561	6,561	.	6,561	38	
	Mal do.	1881-82	5,493	5,493	40	5,453	62	
	Chel Range—							
	Mungpong forest	1879-80	6,227	6,230	...	6,230	121	
	Leesh do.	1879 80	4,286	4,287	...	4,287	98	
	Geesh do.	1879-80	13,730	13,730	...	13,730	166	
	Noam do.	1879-80	7,868	7,873	1	7,872	75	
	Total ...	...	103,591	103,600	60	103,540	1,301	

FORM No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1889, *to accompany Report for* 1888-89—continued.

Divisions and Sub-divisions.	Forest Tracts.	Years in which protection commenced.	Area actually protected up to 31st May 1888.	During dry season of 1889. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season up to 31st May 1889.	Remarks.
	I.—Areas protected by isolation and other special measures—continued.		Acres.	Acres.	Acres.	Acres.	Rs.	
Kurseong Sub-division (Darjeeling Division).	Balasan Range (part)—							
	Manjua forest	1882-83	1,112	1,112	...	1,112	87	
	Manjha do.	1879-80	4,079	4,078	...	4,078	127	
	Mechi do.	1884-85	2,859	3,152	331	2,821	209	
	Balasan do.	1884-85	1,761	1,761	1	1,760	117	
	Terai Range—							
	Tukriajhar forest	1882-83	1,364	1,364	...	1,364	106	
	Dalkajhar do.	1878-79	5,820	5,820	...	5,820	520	
	Pantapari do.	1878-79	2,600	2,600	...	2,600	291	
	Bamonpokri Range—							
	Bamonpokri forest ...	1876-77	1,372	1,372	...	1,372	255	
	Rakti do. ...	1876-77	195	195	...	195	90	
	Lamagumba do. ...	1876-77	488	488	...	488	59	
	Sukna Range—							
	Sukna forest	1876-77	4,353	4,353	...	4,353	544	
	Mahanadi do.	1876-77	4,533	4,533	...	4,533	185	
	Champasari Range—							
	Champasari forest	1876-77	3,063	3,063	...	3,063	105	
	Choklong do.	1876-77	10,144	10,144	...	10,144	114	
	Latpanchor do.	1876-77	3,495	3,495	...	3,495	37	
	Sivoke do.	1876-77	4,623	4,623	...	4,623	241	
	Total		51,861	52,153	332	51,821	3,087	
Julpigori Sub-division (Julpigori Division).	Apalchand Range—							
	Guzliduba block	1878-79	8,312	8,312	...	8,312	117	
	Rajadanga do.	1878-79	5,786	6,986	5,200	1,786	75	
	Chengmari do.	1878-79	3,000	3,200	410	2,790	104	
	Malhati do.	1878-79	310	310	...	310	7	
	Kyranti do.	1878-79	53	53	53	...	17	
	Tondu Range—							
	North Tondu block ...	1878-79	7,740	7,740	..	7,740	103	
	Upper do. do. ..	1878-79	21,480	21,480	3,200	18,280	360	
	Lower do. do. ...	1878-79	23,360	25,240	1,000	24,240	220	
	Muraghat Range—							
	Dainah forest	1881-82	5,860	15,360	1,000	14,360	129	
	Muraghat do.	1872-73	10,880	10,880	500	10,380	122	
	Rehti do.	1881-82	2,923	2,923	...	2,923	23	
	Goshaihat do.	1881-82	1,340	1,840	300	1,540	86	
	Falakata Range—							
	Dulgaon forest	1879-80	875	1,375	...	1,375	89	
	Dumchi do.	1879-80	3,042	3,062	...	3,062	82	
	Khairbari do.	1882-83	1,775	1,775	...	1,775	55	
	Teeti do.	1882-83	7,793	7,795	...	7,795	92	
	Salbari do.	1882-83	12	12	...	12	16	
	Total		104,541	118,343	11,663	106,680	1,697	
Buxa Sub-division (Julpigori Division).	Borojhar Range—							
	Borojhar forest (part), sâl tract	1879-80	19,840	19,840	...	19,840	327	
	Butri forest	1888-89	...	1,400	250	1,150	82	
	Salkuer do.	1883-84	1,100	1,100	60	1,040	70	
	Buxa Range—							
	Raimatong block... ...	1876-77	5,116	5,136	...	5,136	1,278	
	Poro do.	1876-77	15,910	16,000	...	16,000		
	Rajabhatkawa do.	1876-77	30,091	30,091	30	30,061		
	Panbari do.	1876-77	21,120	21,120	...	21,120		
	Haldibari Range—							
	Raidak forest (part), sâl tract	1882-83	7,500	7,500	...	7,500	228	
	Bholka forest	1877-78	12,800	12,800	...	12,800	111	
	Mahakalguri forest ...	1886-87	215	...	...	...	...	
	Total		113,692	114,987	340	114,647	2,096	
Palamow Sub-division (Chota Nagpore Division).	Northern Range—							
	Kechki forest	1879-80	440	440	...	440	4	
	Betlah do.	1879-80	6,847	6,847	660	6,187	109	
	Saidope do.	1879-80	27,400	27,520	...	27,520	149	
	Tungari do.	1880-81	5,715	5,715	...	5,715	22	
	Ramundag do.	1879-80	7,380	10,880	50	10,830	64	
	Kumandi do.	1879-80		8,960	...	8,960	102	
	Chatum do.	1885-86	855	855	...	855	29	
	Peeree do.	1885-86	1,523	1,523	...	1,523	46	
	Ooreeya do.	1885-86	523	698	...	698	30	
	Southern Range—							
	Seema forest	1879-80	26,240	26,240	3,014	23,226	165	
	Barasand do.	1879-80	30,211	30,711	14,004	16,707	159	
	Total		102,134	120,389	17,728	102,661	878	
Hazaribagh sub-division, (Chota Nagpore Division).	Koderma forest	1879-80	29,767	29,767	...	29,767	289	Since this report went to press information received that 7,630 Acres were burnt in dry season 1888, but not recorded in annual report for 1887-88.

FORM No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1889, *to accompany Report for* 1888-89—continued.

Divisions and Sub-divisions.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1888.	During dry season of 1889. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season up to 31st May 1889.	Remarks.
			Acres.	Acres.	Acres.	Acres.	Rs.	
	I.—Areas protected by isolation and other special measures—concluded.							
Singbhoom Sub-division, (Chota Nagpore Division).	Saranda Range—							
	Ambia block	1885-86	17,920	19,600	17,200	2,400	178	
	Gatkori do.	1887-88	...	16,000	4,000	12,000	156	
	Kurumpoda do.	1888-89	...	31,150	31,150	...	129	
	Kodolibad do.	1888-89	...	15,360	15,360	...	66	
	Tholokbad do.	1888-89	...	29,400	29,400	...	106	
	Tirilposi do.	1888-89	...	35,200	35,200	...	129	
	Samtia do.	1888-89	...	19,200	19,200	...	169	
	Ankua do.	1884-85	27,200	35,200	12,200	23,000	159	
	Chyebassa Range—							
	Saitba forest	1884-85	17,655	18,560	15,963	2,597	173	
	Santara do.	1887-88	45,670	46,080	44,487	1,593	289	
	Kolhan Range—							
	Latua forest	1887-88	44,745	44,800	44,800	...	276	
	Leda do.	1884-85	24,320	24,320	4,000	20,320	244	
	Porahat Range—							
	Birda block	1884-85	3,840	3,840	640	3,200	68	Proposed reserves.
	Girga do.	1887-88	4,640	16,640	...	16,640	70	
	Total ...		185,990	355,350	273,600	81,750	2,212	
Chittagong Division.	Sitapahar Plantation	1377-78	518	...	...	...	...	
Angul Sub-division (Orissa Division).	Tikarpara Range	1884-85	79,702	103,040	1,600	101,440	721	
	Bagmunda do.	1884-85	28,530	40,960	180	40,780	311	
	Durgapur Range—							
	Durgapur block	1884-85	8,015	8,320	640	7,680	228	
	Tabada do.	1884-85	2,690	2,720	...	2,720	105	
	Wontullia do.	1884-85	200	2,400	...	2,400	72	
	Kotoda do.	1884-85	5,320	6,720	...	6,720	122	
	Simlipoda do.	1884-85	9,665	9,920	1,280	8,640	184	
	Konoloi do.	1884-85	5,060	5,120	...	5,120	150	
	Total ...		139,182	179,200	3,700	175,500	1,893	
Khorda Sub-division (Orissa Division.)	Dandimal Range—							
	Churang block	1885-86	1,328	1,330	...	1,330	113	
	Chandka do. ...	1885-86	19,178	19,240	46	19,194	648	
	Barhapita do., No. 1							
	Ditto do., No. 2							
	Haripur do.	1885-86	941	941	...	941	136	
	Jamjhari do.	1885-86	297	300	...	300	64	
	Majana do.	1885-86	435	435	2	433	133	
	Bhola do.	1885-86	283	283	...	283	44	
	Daspur do.	1885-86	452	452	...	452	103	
	Bharatpur do.	1885-86	2,922	2,952	3	2,949	139	
	Rampur do.	1885-86	1,125	1,125	...	1,125	76	
	Mendhasal do.	1885-86	815	815	...	815	61	
	Bhagbatipur do.	1887-88	456	456	...	456	82	
	Khorda Range—							
	Barunai Hill block ...	1885-86	1,200	1,200	...	1,200	92	
	Panchgarh do. ...	1885-86	1,760	1,760	110	1,650	108	
	Jaimangal do. ...	1885-86	323	356	...	356	45	
	Nagapati do. ...	1885-86	1,498	1,498	...	1,498	93	
	Banpur Range—							
	Arang block	1885-86	6,520	6,840	200	6,640	191	
	Tamna do.	1885-86	7,480	8,280	6	8,274	357	
	Katual do.	1885-86	2,131	2,361	30	2,331	77	
	Bankar do.	1885-86	3,120	3,120	...	3,120	75	
	Kuhuri Range—							
	Kuhuri block	1885-86	2,120	2,120	...	2,120	153	
	Sulia do.	1885-86	4,280	4,280	...	4,280	249	Including Rs. 3 expended in extinguishing fire in adjacent protected forest.
	Total ...	...	58,664	60,144	397	59,747	3,039	
	Total Head I ...	...	889,940*	1,133,933†	307,820‡	826,113§	16,492	
	II.—Areas protected by less extensive measures and by rules.							
Darjeeling Sub-division (Darjeeling Division).	Senchal Range	1881-82	3,389	3,389	...	3,389	2	
	Mahaldaran do.	1881-82	4,136	4,136	...	4,136	9	
	Tukdah do.	1881-82	7,509	7,509	...	7,509	20	
	Goompahar do.	1881-82	9,245	9,245	...	9,245	...	
	Singalila do.	1882-83	41,244	41,254	...	41,254	...	
	Total ...	...	65,523	65,533	...	65,533	31	
Teesta Sub-division (Darjeeling Division).	East Teesta Range (part)—							
	Dumsong forest	1881-82	14,032	14,032	...	14,032	106	
	Rissoom do.	1881-82	5,830	5,830	...	5,830	81	
	Loolagaon do.	1881-82	8,239	8,239	...	8,239	94	
	Pankasari Range (part)—							
	Pankasari forest	1881-82	9,809	9,809	...	9,809	63	
	Renock do.	1881-82	3,225	3,225	...	3,225	31	
	Rechi-La do.	1881-82	10,644	10,644	...	10,644	31	
	Mo do.	1881-82	4,453	4,453	...	4,453	27	
	Total ...	...	56,232	56,232	...	56,232	433	

* Includes 8,480 acres, proposed reserves, Singbhoom sub-division, which were protected by special measures.
† Includes 20,480 acres, attempted out of ditto.
‡ Includes 640 acres, burnt out of ditto.
§ Includes 19,840 acres, successfully protected out of ditto.

Form No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1889, *to accompany Report for* 1888-89—concluded.

Divisions and Sub-divisions.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1889.	During dry season of 1889. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season up to 31st May 1889.	Remarks.
			Acres.	Acres.	Acres.	Acres.	Rs.	
	II.—Areas protected by less extensive measures and by rules—concluded.							
Kurseong Sub-division (Darjeeling Division).	Kurseong Range—							
	Dhobijhora forest	1882-83	589	589	...	589	83	Detailed information as to expenditure wanting.
	Babukhola do.	1882-83	1,840	1,840	...	1,840		
	Sivakhola do.	1882-83	408	408	..	408		
	Paglajhora do.	1882-83	35	35	...	35		
	Balasan Range (part)—							
	Koohein forest	1882-83	514	514	...	514		
	Total ...	...	3,386	3,386	..	3,386	83	
Buxa Sub-division (Julpigori Division).	Haldibari Range—							
	Dhumpara forest	1881-82	4,040	...	...	...	...	
Hazaribagh Sub-division (Chota Nagpore Division).	Ranchi Range—							
	Horhap forest	1886-87	1,098	1,098	...	1,098	5	Transferred from Singbhoom sub-division from 1st April 1888.
	Total, Head II ...		130,279	126,249	...	126,249	552	
	Grand Total ...	...	1,020,219*	1,260,182†	307,820‡	952,362§	17,044	

* Includes 8,480 acres proposed reserves, Singbhoom sub-division, which were protected by special measures.
† Includes 20,480 acres, attempted out of ditto.
‡ Includes 640, acres, burnt out of ditto.
§ Includes 19,840 acres, successfully protected out of ditto.

Form No. 52.

FOREST DEPARTMENT, BENGAL.

Area of Plantations, 1888-89.

Division or Sub-division.	Name of Plantation.	Area in Acres. On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Receipts of the year.	Charges of the year.	Remarks.
	Regular Plantations.					Rs.	Rs.	
Darjeeling Sub-division.	Rangbul block	281	...	...	281	...	130	Nurseries.
	Dooteria do.	275	60	...	335	...	629	
	Tungsong do.	104	...	...	104	...	82	
	Rangnu do.	139	...	...	139	...	63	
	Rangirum do.	40	...	...	40	...	235	
	Poomong do.	205	...	...	205	...	421	
	Goom do.	150	...	...	150	...	158	
	Palongdong do.	...	...	...	...	...	88	
	Total ...	1,194	60	...	1,254	...	1,806	
Kurseong Sub-division.	Dhobijhora block	13	...	...	13	...	...	
	Ditto compartments 5 & 6	23	...	...	23	...	...	
	Ditto ditto 1 to 4	25	2	...	27	...	99	
	Bamonpokri forest	477	...	...	477	...	151	
	Sukna block	7	...	...	7	...	...	
	Siligori plantation	12	...	..	12	...	40	
	Chamta block, compartment 5 ...	2	...	...	2	...	...	
	Ditto ditto 1 ...	115	...	...	115	...	13	
	Ditto ditto 3 ...	54	...	...	54	...	...	
	Kynanuka block, ditto 2 .	25	..	...	25	...	...	
	Adalpur do. ditto 2 ...	52	...	...	52	...	...	
	Balasan, Manjha and Lohaguri blocks.	...	...	...	...	...	7	
	Dalkajhar forest	...	...	...	...	...	10	
	Total ...	805	2	...	807	...	320	

FORM No. 52.

FOREST DEPARTMENT, BENGAL.

Area of Plantations, 1888-89—concluded.

Division or Sub-division.	Name of Plantation.	Area in Acres. On 1st April 1888.	Added during the year.	Excluded during the year.	Area on 31st March 1889.	Receipts of the year.	Charges of the year.	Remarks.
	Regular Plantations—concld.					Rs.	Rs.	
Julpigori Sub-division.	Falakata	3	...	...	3	...	...	
Chittagong Division.	Pahartalli	5	...	...	5	...	...	
	Sitapahar	546	37	...	583	...	3,167	
	Total ...	551	37	...	588	...	3,167	
Khorda Sub-division.	Barunai Hill	178	43	...	221	...	458	
	Chandmari	15	...	...	15	...	89	
	Santrapur	8	...	...	8	...	25	
	Total ...	201	43	...	244	...	572	
	Total Regular Plantations ...	2,754	142	...	2,896	...	5,865	
	Cultural operations.							
Darjeeling Sub-division.	Sepoydhura block	24	...	...	24	...	250	
	Chongtong do.	1	...	...	1	...	5	
	Pograinbong do.	1	...	...	1	...	...	
	Total ...	26	...	...	26	...	255	
Teesta Sub-division	Seem block	2	...	...	2	...	...	
Kurseong Sub-division.	Dhobijhora block	210	...	...	210	...	6	
	Chamta do.	11	...	...	11	...	...	
	Sukna do.	2	...	...	2	...	12	
	Champasari do.	...	...	...	...	...	11	
	Harlia do.	10	...	...	10	...	...	
	Tukriajhar do.	1	...	...	1	...	...	
	Rakti do.	53	...	...	53	...	10	
	Miscellaneous do.	8	...	...	8	...	...	
	Total ...	295	...	...	295	...	39	
Buxa Sub-division.	Rajabhatkawa block—							
	Compartment 25	19	...	...	19	...	...	
	Dittō 26	511	...	...	511	...	...	
	Ditto 24	1	...	...	1	...	...	
	Ditto 21	47	...	...	47	...	...	
	Ditto 23	19	...	...	19	...	...	
	Ditto 15	1	...	...	1	...	49	
	Poro block	21	...	...	21	...	...	
	Total ...	619	...	...	619	...	49	
Palamow Sub-division.	Betlah	...	...	...	...	...	18	
Hazaribagh Sub-division.	Koderma	...	...	...	...	...	1	
Singbhoom Sub-division.	Range head-quarters	...	...	...	...	...	33	
Angul Sub-division.	Bichundabogra	...	...	...	...	...	14	
	Tikarpara	2	...	...	2	...	...	
Khorda Sub-division.	Chandka block—							
	Dhobabundh	13	...	...	13	...	124	
	Ghosariparia	...	2	...	2	...	8	These areas were omitted from previous returns.
	Bhalunkiparia	...	2	...	2	...	4	
	Compartment 9	...	10	...	10	...	189	
	Churang block—							
	Compartment 6	...	5	...	5	...	127	
	Ditto 8	...	5	...	5	...	111	
	Total ...	15	24	...	39	...	577	
	Total Cultural operations ...	957	24	...	981	...	972	
	GRAND TOTAL ...	3,711	166	...	3,877	...	6,837	

FORM No. 53.

FOREST DEPARTMENT, BENGAL.

Trees felled or girdled by Government Agency during the year 1888-89. (*Selection fellings.*)

Division.	Trees felled or girdled. Description.	Number.
Darjeeling	*Darjeeling Sub-division.*	
	Champ ...	4
	Buk ...	29
	Katus ...	12
	Phalat ...	14
	Chilauni ...	1
	Kawala ...	63
	Lali ...	32
	Kabasi ...	13
	Miscellaneous ...	45
	Total ...	213
	Teesta Sub-division.	
	Champ ...	1
	Sâl ...	7
	Katus ...	4
	Kawala ...	1
	Bangi ...	1
	Total ...	14
	Kurseong Sub-division.	
	Katus ...	4
	Kawala ...	10
	Gobria ...	2
	Chilauni ...	2
	Siris ...	3
	Kabasi ...	4
	Bhadrasi ...	3
	Saur ...	1
	Miscellaneous ...	27
	Total ...	56
Julpigori	*Julpigori Sub-division.*	
	Sâl ...	50
	Sissu ...	10
	Total ...	60
	Buxa Sub-division.	
	Champ ...	3
	Sâl ...	70
	Sissu ...	125
	Total ...	198
Orissa	Sâl ...	53
	Miscellaneous ...	8
	Total ...	61
	Abstract of the Circle.	
	Champ ...	8
	Sâl ...	180
	Buk ...	29
	Katus ...	20
	Phalat ...	14
	Sissu ...	135
	Chilauni ...	3
	Kawala ...	74
	Lali ...	32
	Kabasi ...	17
	Gobria ...	2
	Siris ...	3
	Bhadrasi ...	3
	Miscellaneous ...	82
	Total ...	602

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year* 1888-89.

Division.	Description of Materials.	Outturn in cubic feet. Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government agency	Purchasers.	Free grants.	Right-holders.	Remarks.
				1.—RESERVED FORESTS.						
				TIMBER.						
	Scantling.									
Darjeeling sub-division (Darjeeling Division).	Oak scantling	189	...	...	189	189	...	...	...	
	Champ ditto	157	...	...	157	157	...	...	...	
	Total scantling ...	346	...	...	346	346	...	...	...	
	Trees.									
	Tun (dry)	750	...	...	750	...	750	...	...	The following equivalents have been taken :— 1 tree = 250 cubic feet. 1 pole = 10 „ „
	Champ	32,250	...	...	32,250	...	32,250	...	...	
	Buk	30,250	...	...	30,250	...	30,250	...	...	
	Katus	10,500	...	...	10,500	...	9,500	1,000	...	
	Phalat	7,500	...	...	7,500	...	7,500	...	...	
	Chilauni	3,500	...	...	3,500	...	3,500	...	...	
	Kawala	13,750	...	...	13,750	...	13,750	...	...	
	Gobria	3,500	...	...	3,500	...	3,500	...	...	
	Tarsing	2,000	...	...	2,000	...	2,000	...	...	
	Kabashi	1,750	...	...	1,750	...	1,750	...	...	
	Angaria	250	...	...	250	...	250	...	...	
	Sissi	500	...	...	500	...	500	...	...	
	Lali	4,750	...	...	4,750	...	4,750	...	...	
	Bhadrasi	250	...	...	250	...	250	...	...	Compensation was accepted for one tree.
	Burgonati	250	...	...	250	...	250	...	...	
	Silver fir	500	...	...	500	...	...	500	...	100 cubic feet each tree.
	Putli	250	...	...	250	...	250	...	...	
	Barkawla	250	...	...	250	...	250	...	...	
	Lepcha Kawala	2,750	...	...	2,750	...	2,750	...	...	
	Dabdabia	500	...	...	500	...	500	...	...	
	Harray	250	...	...	250	...	250	...	...	
	Lali poles	60	...	...	60	...	60	...	...	
	Miscellaneous poles	4,730	...	...	4,730	...	4,730	...	...	
	Buk sapling	10	...	...	10	...	10	...	...	Removed without permit, for which compensation was realised.
	Katus ditto	10	...	...	10	...	10	...	...	
	Miscellaneous saplings ...	160	...	...	160	...	160	...	...	
	Cryptomeria pole	10	...	...	10	...	10	...	...	
	Total trees ...	121,230	...	...	121,230	...	119,730	1,500	...	
	Dry Timber.									
	Tun logs	...	563	...	563	...	563	...	...	
	Champ do.	...	5,115	...	5,115	...	5,115	...	...	
	Buk do.	...	5,971	...	5,971	...	5,971	...	...	
	Katus do.	...	3,415	...	3,415	...	3,415	...	...	
	Phalat do.	...	1,621	...	1,621	...	1,621	...	...	
	Kawala do.	...	2,571	...	2,571	...	2,571	...	...	
	Chilauni do.	...	514	...	514	...	514	...	...	
	Kabashi do.	...	939	...	939	...	939	...	...	
	Gobria do.	...	352	...	352	...	352	...	...	
	Lali do.	...	862	...	862	...	862	...	...	
	Pipli do.	...	147	...	147	...	147	...	...	
	Miscellaneous do.	...	2,043	...	2,043	...	2,043	...	...	
	Total dry timber ...	...	24,113	...	24,113	...	24,113	...	...	
	Scantling.									
Teesta sub-division (Darjeeling Division).	Katus shingles (10,100) ...	1,471	...	...	1,471	1,471	...	...	...	
	Kawala ditto (1,000) ...									
	Bangi ditto (3,000) ...									
	Sâl scantling	214	...	...	214	214	...	...	...	
	Other ditto	107	...	...	107	107	...	...	...	
	Sâl sleepers	...	261	...	261	261	...	...	...	Found in forest.
	Do. slab	...	40	...	40	40	...	...	...	
	Total scantling ...	1,792	301	...	2,093	2,093	...	...	...	
	Trees.									
	Tun	1,500	...	...	1,500	...	1,500	...	...	The following equivalents have been taken :— 1 tree = 250 cubic feet. 1 pole = 5 „ „
	Champ	4,750	...	...	4,750	...	4,750	...	...	
	Sâl	12,250	...	...	12,250	...	12,250	...	...	
	Lampatia	30,750	...	...	30,750	...	30,750	...	...	
	Panisaj	22,500	...	...	22,500	...	22,500	...	...	
	Saj	1,000	...	...	1,000	...	1,000	...	...	
	Gaguldhup	3,500	...	...	3,500	...	3,500	...	...	
	Simul	12,500	...	...	12,500	...	12,500	...	...	
	Lali	2,750	...	...	2,750	...	2,750	...	...	
	Chilauni	9,500	...	...	9,500	...	9,500	...	...	
	Other	3,250	...	...	3,250	...	3,250	...	...	
	Malato poles	...	145	...	145	...	145	...	...	
	Sâl do.	...	870	...	870	...	870	...	...	
	Katus do.	...	225	...	225	...	225	...	...	
	Kawala do.	...	110	...	110	...	110	...	...	
	Chilauni do.	...	170	...	170	...	170	...	...	
	Other do.	...	1,470	...	1,470	...	1,470	...	...	
	Chilauni saplings	...	75	...	75	...	75	...	...	Removed without permit, for which compensation was realised.
	Other do.	...	85	...	85	...	85	...	...	
	Total Trees ...	104,250	3,150	...	107,400	...	107,400	...	...	

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FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year 1888-89—(continued).

Division.	Description of materials.	Outturn in cubic feet. Selection fellings.	Clearances.	Thinnings.	Total.	Removed by: Government agency.	Purchasers.	Free grants.	Right-holders.	Remarks.
					Timber—*continued.*					
	Dry Timber.									
Teesta sub-division (Darjeeling Division)—*concld.*	Sál logs	...	995	...	995	...	995	...	...	
	Sissu do.	...	152	...	152	...	152	...	...	
	Saj do.	...	124	...	124	...	124	...	...	
	Kawala do.	...	175	...	175	...	175	...	...	
	Panisaj do.	...	755	...	755	...	755	...	...	
	Lampatia do.	...	286	...	286	...	286	...	...	
	Gambhari do.	...	124	...	124	...	124	...	...	
	Lali do.	...	142	...	142	...	142	...	...	
	Angari do.	...	230	...	230	...	230	...	...	
	Other do.	...	298	...	298	4	294	...	...	
	Total Dry Timber ...	...	3,281	...	3,281	4	3,277	...	...	
	Drift wood.									
	Sál poles	...	310	...	310	...	310	...	...	
	Sissu do.	...	650	...	650	...	650	...	...	
	Khair do.	...	275	...	275	...	275	...	...	
	Other do.	...	65	...	65	...	65	...	...	
	Sál logs	...	278	...	278	...	278	...	...	
	Panisaj do.	...	80	...	80	...	80	...	...	
	Lampatia do.	...	95	...	95	...	95	...	...	
	Sissu do.	...	229	...	229	...	229	...	...	
	Goguldhup do.	...	182	...	182	...	182	...	...	
	Gambhari do.	...	115	...	115	...	115	...	...	
	Other do.	...	101	...	101	...	101	...	...	
	Total Drift Wood ...	...	2,380	...	2,380	...	2,380	...	...	
	Scantling.									
	Katus	178	...	...	178	178	...	...	...	
	Kawala	93	...		93	93	...	...	...	
	Total Scantling ...	271	...	...	271	271	...	...	...	
	Trees.									
	Tun	2,750	...	...	2,750	...	2,750	...	...	
	Champ	750	...	...	750	...	750	...	...	
	Sál	20,250	...	...	20,250	...	20,250	...	...	
	Buk	5,250	...	...	5,250	...	5,250	...	...	
	Katus	1,500	...	...	1,500	...	1,500	...	...	
	Phalat	250	...	...	250	...	250	...	...	
	Chilauni	4,000	...	...	4,000	...	4,000	...	...	
	Lampatia	34,500	...	...	34,500	...	34,500	...	...	
	Sissu	8,250	...	...	8,250	...	8,250	...	...	
	Simul	1,250	...	...	1,250	...	1,250	...	...	
	Goguldhup	2,750	...	...	2,750	...	2,750	...	...	
	Mainakat	4,250	...	...	4,250	...	4,250	...	...	
	Saj	14,250	...	...	14,250	...	14,250	...	...	
	Panisaj	15,000	...	...	15,000	...	15,000	...	...	
	Gobria	5,500	...	...	5,500	...	5,500	...	...	
	Kawala	2,000	...	...	2,000	...	2,000	...	...	
	Kimbu	500	...	...	500	...	500	...	...	
	Tarsing	250	...	...	250	...	250	...	...	
	Other	11,250	...	...	11,250	...	11,000	250	...	
Kurseong sub-division (Darjeeling Division).	Sál poles	...	...	1,810	1,810	930	860	20	...	
	Sissu do.	...	...	180	180	...	180	...	...	
	Other do.	...	295	65,090	65,385	37,040	(a)28,345	...	...	(a) Including 295 cubic feet removed without permit, for which compensation was realised.
	Total Trees ...	134,500	295	67,080	201,875	37,970	163,635	270	...	
	Dry Timber.									
	Sál wood	...	92	...	92	(b)41	51	...	...	(b) 8 cubic feet confiscated.
	Do. logs	...	615	...	615	...	615	...	...	
	Tun do.	...	56	...	56	...	56	...	...	
	Champ do.	...	132	...	132	...	132	...	...	
	Buk do.	...	144	...	144	...	144	...	...	
	Chestnut do.	...	257	...	257	...	257	...	...	
	Saj do.	...	567	...	567	...	567	...	...	
	Panisaj do.	...	166	...	166	...	166	...	...	
	Lampatia do.	...	171	...	171	...	171	...	...	
	Chilauni do.	...	732	...	732	...	732	...	...	
	Gobria do.	...	536	...	536	...	536	...	...	
	Kawala do.	...	1,222	...	1,222	...	1,222	...	...	
	Sissu do.	...	786	...	786	...	786	...	...	
	Other logs	...	814	...	814	...	(c)814	...	...	(c) 20 cubic feet removed without permit, for which compensation was realised.
	Total Dry Timber ...	...	6,290	...	6,290	41	6,249	...	...	
	Drift Wood.									
	Sál logs	...	78	...	78	...	78	...	...	
	Sissu do.	...	321	...	321	...	321	...	...	
	Simul do.	...	59	...	59	...	59	...	...	
	Sissu poles	...	50	...	50	...	50	...	...	
	Total Drift Wood ...	...	508	...	508	...	508	...	...	

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FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year 1888-89—continued.

Division.	Description of materials.	Outturn in cubic feet. Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government agency.	Purchasers.	Free grants.	Right-holders.	Remarks.
		Timber—*continued.*								
	Trees.									
Julpigori sub-division (Julpigori Division).	Sál	24,490	...	...	24,490	1,930	22,560	...	...	The following equivalents have been taken for the timber, &c., other than removed by Government agency :— 1 tree = 120 cubic feet. 1 pole = 10 „ „
	Sissu	637	...	...	637	517	120	...	...	
	Total Trees ...	25,127	...	...	25,127	2,447	22,680	...	...	
	Dry Timber.									
	Sál logs (confiscated)	...	669	...	669	669	...	...	...	
	Do. poles	...	24,409	...	24,409	...	(a)24,409	...	...	(a) Estimated 300 cubic feet removed without permit, for which compensation was realised.
	Sissu do.	...	863	...	863	...	863	...	...	
	Total Dry Timber ...	...	25,941	...	25,941	669	25,272	...	...	
	Drift Timber.									
	Sál poles	...	1,306	...	1,306	2	(b)1,304	...	...	(b) 60 cubic feet confiscated.
	Sissu do.	...	690	...	690	...	(c)690	...	...	(c) Estimated 240 cubic, feet removed without permit, for which compensation was realised.
	Other logs	...	493	...	493	...	493	...	...	
	Total Drift Timber ...	...	2,489	...	2,489	2	2,487	...	...	
	Trees.									
Buxa sub-division (Julpigori Division).	Sál	3,459	...	...	3,459	2,759	600	100	...	The following equivalents have been taken for the timber, &c., other than removed by Government agency :— C. ft. 1 Sál tree = ... 100 1 Sissu and other = 80 1 Champ = ... 150 1 dry pole = ... 10
	Sissu	5,782	...	...	5,782	3,782	2,000	...	...	
	Champ	956	...	...	956	506	450	...	...	
	Chilauni	80	...	...	80	...	80	...	...	
	Total Trees ...	10,277	...	...	10,277	7,047	3,130	100	...	
	Dry Timber.									
	Sál poles	14,535	...	...	14,535	(d)30	(e)13,125	1,380	...	(d) Confiscated.
	Do. slabs and pieces	...	2,404	...	2,404	2,327	77	...	...	(e) Estimated 30 cubic feet removed without permit, for which compensation was realised.
	Sissu poles	2,162	...	...	2,162	...	1,562	600	...	
	Miscellaneous poles	1,209	...	...	1,209	...	...	1,209	...	
	Ends, pieces, posts, &c. ...	...	28	...	28	...	28	...	...	
	Total Dry Timber ...	17,906	2,432	...	20,338	2,357	14,792	3,189	...	
	Drift Sissu logs	...	160	...	160	160	...	...	...	
Hazaribagh sub-division (Chota Nagpur Division).	*Dry Timber.*									
	Sál poles	...	555	...	555	...	555	...	...	
	Scantling.									
Singbhoom sub-division (Chota Nagpur Division).	Sál beams	...	2,019	...	2,019	2,019	...	...	...	
	Do. scantling	...	299	...	299	299	...	...	...	
	Do. planks	...	1,352	...	1,352	1,352	...	...	...	
	Do. slabs	...	140	...	140	140	...	...	...	
	Other scantling	...	32	...	32	32	...	...	...	
	Total scantling ...	...	3,842	...	3,842	3,842	...	...	...	
	Trees.									
	Sál	21,150	...	...	21,150	...	20,700 (a) 450	...	...	The following equivalents have been taken for trees and poles other than those removed by Government agency :— C. ft. 1 Sál green or dry tree=150 1 Other tree ... ...=40 1 Sál or other pole ...= 5
	Do. (dry)	3,000	...	...	3,000	...	3,000	...	...	
	Other	200	...	...	200	...	40 (a) 160	...	...	
	Hessel	280	...	...	280	...	...	280	...	
	Various	...	10,000	...	10,000	...	...	10,000*	...	
	Total trees ...	24,630	10,000	...	34,630	...	24,350	10,280	...	(a) Removed without permit, for which compensation was realised. * Estimated 220 privileged villages.
	Dry timber.									
	Sál poles	...	6,988	...	6,988	643	6,345	...	...	
	Other do.	...	525	...	525	100	225 (a) 200	...	...	
	Total Dry Timber ...	...	7,513	...	7,513	743	6,770	...	...	
	Confiscated.									
	Sál poles	...	20	...	20	20	...	...	...	
	Trees.									
Sunderbuns Division (Reserved Forests).	Sundri logs and timber ...	5,844,884	...	...	5,844,884	3,776*	5,841,108	...	...	In calculating the volume, 1 maund is taken as =1¼ c. ft. * Confiscated.
	Pussur ditto	138,775	...	...	138,775	7*	138,768	...	...	
	Amoor ditto	10,416	...	...	10,416	...	10,416	...	...	
	Goran posts	1,176,840	...	...	1,176,840	...	1,176,840	...	...	
	Keora timber	343,392	...	...	343,392	...	343,392	...	...	
	Kankra posts	26,208	...	...	26,208	...	26,208	...	...	
	Kripa do.	62,272	...	...	62,272	...	62,272	...	...	
	Gewa do.	266,224	...	...	266,224	...	266,224	...	...	
	Dhundal do.	46,592	...	...	46,592	...	46,592	...	...	
	Bani timber	14,000	...	...	14,000	...	14,000	...	...	
	Jam do.	3,136	...	...	3,136	...	3,136	...	...	
	Singore posts	1,232	...	...	1,232	...	1,232	...	...	
	Bhara do.	6,272	...	...	6,272	...	6,272	...	...	
	Teak planks	9	...	...	9	9*	...	...	...	
	Total Timber ...	7,940,252	...	...	7,940,252	3,792	7,936,460	...	...	

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Outturn of Timber and Firewood during the year 1888-89—continued.

Division.	Description of materials.	Outturn in cubic feet. Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government agency.	Purchasers.	Free grants.	Right-holders.	Remarks.
					TIMBER—*concluded.*					
	Scantling.									
Chittagong Division (Reserved Forests).	Other planks	380	...	...	380	...	380	...	...	
	Trees.									
	Other trees	330	...	...	330	...	330	...	...	
	Do. logs	40	...	...	40	...	40	...	...	
	House posts	84	...	...	84	...	84	...	...	
	Saplings	449	...	...	449	...	449	...	...	
	Teak poles	...	...	1,550	1,550	1,550	...	...	...	
	Other do.	278	...	...	278	262	16	...	...	
	Total trees ...	1,181	...	1,550	2,731	1,812	919	...	...	
Orissa Division (Reserved Forests).	*Scantling.*									
	Sál rafters	...	8	...	8	...	...	8	..	
	Sidha do.	...	16	...	16	...	16	...	...	
	Total Scantling ...	...	24	...	24	...	16	8	...	
	Trees.									
	Sál	604	109	...	713	678	35	...	...	
	Other	...	223	...	223	...	183	40	...	
	Total Trees ...	604	332	...	936	678	218	40	...	
	Dry Timber.									
	Sál logs	...	65	...	65	...	65	...	...	
	Other do.	...	69	...	69	...	69	...	...	
	Kalakhambas	...	16	...	16	...	16	...	...	
	Sál posts	...	435	...	435	...	421	14	...	
	Other do.	4	597	...	601	4	597	...	...	
	Other pieces	...	68	...	68	...	68	...	...	
	Total Dry Timber ...	4	1,250	...	1,254	4	1,236	14	...	
	Total Timber, Reserved Forests	8,382,750	94,516	68,630	8,545,896	63,938	8,466,557	15,401	...	
					FUEL.					
Darjeeling subdivision (Darjeeling Division).	Charcoal	...	...	99,645	99,645	99,645	...	...	...	1 Maund firewood=1¾ cubic foot solid wood. 1 Maund charcoal=7 cubic feet solid wood. 1 Cord firewood=82 cubic feet solid wood. 1 Bag charcoal=7 cubic feet solid wood. 1 drystick permit=52 cubic feet solid wood. The thinnings are regeneration fellings.
	Firewood	13,530	16,261	125,251	155,042	155,042	...	...	...	
	Charcoal	...	...	12,019	12,019	...	12,019	...	...	
	Firewood	...	...	210,740	210,740	...	210,740	...	...	
	Ditto, dry sticks	...	...	30,056	30,056	...	30,056	...	...	
	Ditto, coolie-loads (2,497)	...	...	2,184	2,184	...	2,184	...	...	
	Ditto, ditto (removed without permit).	...	...	19	19	...	19	...	...	
	Ditto, pieces (ditto) ...	...	...	2	2	...	2	...	...	
	Total Fuel ...	13,530	16,261	479,916	509,707	254,687	255,020	...	...	
Teesta subdivision (Darjeeling Division).	Charcoal	...	...	7,672	7,672	...	7,672	...	...	1 Maund firewood=1¾ cubic foot solid wood. 1 Maund charcoal=7 cubic feet solid wood. 1 Cord firewood=82 cubic feet solid wood.
	Firewood	...	93,411	111,223	204,634	...	204,634	...	...	
	Ditto, monthly permit 3; Ditto, cart-loads 3; Ditto, coolie-loads 1,416 — Estimated maunds 1,536	...	2,688	...	2,688	...	2,688	...	...	
	Ditto, ditto 7 (removed without permit).	...	12	...	12	...	12	...	...	
	Drift.									
	Firewood	...	1,990	...	1,990	...	1,990	...	...	
	Ditto, cart-loads 44; Ditto, coolie-loads 432 — Estimated maunds 872	...	1,526	...	1,526	...	1,526	...	...	
	Total Fuel ...	...	99,627	118,895	218,522	...	218,522	...	...	
Kurseong subdivision (Darjeeling Division).	Firewood	2,450	...	14,350	16,800	16,800	..	...	...	1 Maund firewood=1¾ cubic feet solid wood. 1 drystick permit=15 maunds. 1 Cart-load firewood=10 maunds. 1 Coolie-load firewood=½ maund. The thinnings are regeneration fellings and improvement thinnings. (a) 20 cubic feet removed without permit, for which compensation was realised.
	Ditto	...	...	261,142	261,142	...	261,142	...	...	
	Ditto, cart-load (387) ...	...	6,772	...	6,772	...	6,772	...	...	
	Ditto, coolie-load (47) ...	...	41	...	41	..	(a)41	...	...	
	Ditto, monthly permit (1,254).	...	32,917	...	32,917	...	32,917	...	...	
	Drift.									
	Firewood	...	612	...	612	...	612	...	...	
	Ditto, cart-load (23) ...	...	402	...	402	...	402	...	...	
	Total Fuel ...	2,450	40,744	275,492	318,686	16,800	301,886	...	...	

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FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year 1888-89—continued.

Division.	Description of materials.	Outturn in cubic feet. Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government agency.	Purchasers.	Free grants.	Right-holders.	Remarks.
					Fuel—concluded.					
Julpigori sub-division (Julpigori Division).	Firewood	...	77,484	...	77,484	...	77,484	...	...	1 Maund firewood=1¾ cubic feet solid wood. 1 Cord firewood=82 cubic feet solid wood. * One maund=1¾ cubic feet removed without permit, for which compensation was realised.
	Ditto (drift)	...	22,229	...	22,229	4,550	17,679*	...	...	
	Total Fuel ...	...	99,713	...	99,713	4,550	95,163	...	...	
Buxa sub-division (Julpigori Division).	Firewood	...	7,161	...	7,161	...	7,161	...	...	
Palamow sub-division (Chota Nagpur Division).	Firewood	...	448	...	448	...	448	...	...	
Hazaribagh sub-division (Chota Nagpur Division).	Firewood	...	7,406	...	7,406	...	7,406	...	...	
Singbhoom sub-division (Chota Nagpur Division).	Firewood	...	1,059,357	...	1,059,357	6,213	53,144	1,000,000†	...	† Estimated 220 privileged villages.
	Ditto, confiscated	...	110	...	110	110	...	...	...	
	Charcoal, ditto	...	19	...	19	19	...	...	...	
	Total Fuel ...	...	1,059,486	...	1,059,486	6,342	53,144	1,000,000	...	
Sunderbuns Division (Reserved Forests).	Firewood ... Sundri ...	3,971,843	...	...	3,971,843	827‡	3,971,016	...	...	‡ Confiscated.
	Firewood ... Other ...	5,902,960	...	...	5,902,960	...	5,902,960	...	...	
	Total Fuel ...	9,874,803	...	...	9,874,803	827	9,873,976	...	...	
Orissa Division (Reserved Forests).	Firewood	...	30,147	1,050	31,197	...	29,876	1,321	...	
	Total Fuel, Reserved Forests...	9,890,783	1,360,993	875,353	12,127,129	283,206	10,842,602	1,001,321	...	
					II.—PROTECTED FORESTS.					
	Timber.									
Sunderbuns Division (Protected Forests).	Sál mast (drift)	...	20	...	20	20	...	...	...	
	Sundri logs and timber ...	47,628	...	...	47,628	...	47,628	...	...	
	Pussur ditto	8,736	...	...	8,736	...	8,736	...	...	
	Amoor ditto	140	...	...	140	...	140	...	...	
	Keora timber	1,456	...	...	1,456	...	1,456	...	...	
	Bani ditto	4,144	...	...	4,144	...	4,144	...	...	
	Goran posts	94,864	...	...	94,864	...	94,864	...	...	
	Kripa do.	59,920	...	...	59,920	...	59,920	...	...	
	Kakra do.	8,960	...	...	8,960	...	8,960	...	...	
	Gewa do.	6,272	...	...	6,272	...	6,272	...	...	
	Dhundul do.	3,472	...	...	3,472	...	3,472	...	...	
	Bhara do.	560	...	...	560	...	560	...	...	
	Total Timber and posts ...	236,152	20	...	236,172	20	236,152	...	...	
	Scantling.									
Orissa Division (Protected Forests).	Rai rafters	...	62	...	62	...	...	62	...	
	Sidha ditto	...	836	...	836	...	120	716	...	
	Other ditto	...	372	...	372	...	...	372	...	
	Total Scantling ...	...	1,270	...	1,270	...	120	1,150	...	
	Timber.									
	Miscellaneous logs	...	290	...	290	...	270	20	...	
	Sál posts	...	91	...	91	...	91	...	...	
	Siris do.	...	50	...	50	...	...	50	...	
	Sidha do.	...	76	...	76	...	70	6	...	
	Other do.	...	2,105	...	2,105	...	677	1,428	...	
	Ditto (confiscated)	...	297	...	297	...	297	...	...	
	Bent axles	...	21	...	21	...	16	5	...	
	Total timber ...	...	2,930	...	2,930	...	1,421	1,509	...	
	Total Timber, Protected Forests	236,152	4,220	...	240,372	20	237,693	2,659	...	
	Fuel.									
Sunderbuns Division (Protected Forests).	Firewood Sundri	30,576	...	...	30,576	...	30,576	...	...	
	Firewood Other	638,624	...	...	638,624	...	638,624	...	...	
	Total Fuel ...	669,200	...	...	669,200	...	669,200	...	...	
Orissa Division (Protected Forests).	Charcoal	...	36,169	...	36,169	...	36,169	...	...	1 Maund charcoal = 7 cubic fee solid wood. 1 Maund firewood = 1¾ cubic feet. § Including 3,000,000 cubic feet estimated to have been removed free of charge for sale owing to scarcity. ‖ Under the executive order of Government, revenue credited under major head II.
	Firewood	...	3,028,215	...	3,028,215	...	28,047	3,000,168§	...	
	Ditto house licenses under commutation system 15,121, estimated maunds 1,512,000.	...	2,646,000	...	2,646,000	...	2,646,000‖	...	...	
	Total Fuel ...	...	5,710,384	...	5,710,384	...	2,710,216	3,000,168	...	
	Total Fuel, Protected Forests...	669,200	5,710,384	...	6,379,584	...	3,379,416	3,000,168	...	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year 1888-89—continued.

Division.	Description of materials.	Outturn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.	Right-holders.	
		III.—UNCLASSED STATE FORESTS AND WASTE LANDS.								
		TIMBER.								
Direction Division.	Drift timber	...	2,266	...	2,266	2,266	...	...	...	Bengal share of Gunduck drift.
	Scantling.									
Singbhoom subdivision (Chota Nagpur Division).	Sâl beams	...	1,945	...	1,945	1,945	...	...	...	
	Do. planks	...	1,247	...	1,247	1,247	...	...	...	
	Total Scantling ...	...	3,192	...	3,192	3,192	...	...	...	
	Trees.									
	Sâl	1,350	750	...	2,100	...	2,100	...	...	
	Dry Timber.									
	Sâl poles	...	8,785	...	8,785	...	8,785	...	...	
	Other do.	...	25	...	25	...	25	...	...	
	Total Dry Timber ...	...	8,810	...	8,810	...	8,810	...	...	
Chittagong Division.	Bollsur boats	2,322	...	...	2,322	1,202	1,120	...	...	
	Bylam do.	2,400	...	...	2,400	...	2,400	...	...	80 cubic feet taken as the volume of an average boat.
	Chapalish do.	52,465	...	...	52,465	825	51,640	...	...	10 ditto ditto log.
	Gamhar do.	4,628	...	...	4,628	68	4,560	...	...	2 ditto ditto post.
	Kamdeb do.	16,481	...	...	16,481	561	15,920	...	...	1 ditto ditto sapling.
	Pitraj do.	19,900	...	...	19,900	620	19,280	...	...	2 ditto ditto scantling.
	Phussur do.	80	...	...	80	...	80	...	...	The timber shown as removed by Government agency was all drift or confiscated.
	Tejbahar do.	8,121	...	...	8,121	41	8,080	...	...	
	Telsur do.	8,850	...	...	8,850	530	8,320	...	...	
	Gurjan do.	92	...	...	92	92	...	...	...	
	Chapa do.	189	...	...	189	189	...	...	...	
	Jarool do.	30	...	...	30	30	...	...	...	
	Surajbed do.	27	...	...	27	27	...	...	...	
	Karai do.	26	...	...	26	26	...	...	...	
	Other do.	47,858	...	...	47,858	178	47,680	...	...	
	Chikrasi logs	630	...	...	630	...	630	...	...	
	Chapalish do.	8,297	...	...	8,297	157	8,140	...	...	
	Gamhar do.	7,417	...	...	7,417	207	7,210	...	...	
	Jarool do.	8,433	...	...	8,433	2,163	6,270	...	...	
	Gurjan do.	1,089	...	..	1,089	49	1,040	...	..	
	Kamdeb do.	140	...	...	140	...	140	...	...	
	Kurai do.	20	...	...	20	...	20	...	...	
	Nagessur do.	230	...	...	230	...	230	...	...	
	Surajbed do.	20	...	...	20	...	20	...	...	
	Telsur do.	10	...	...	10	...	10	...	...	
	Tejbahal do.	175	...	...	175	155	20	...	...	
	Tun do.	108	...	...	108	88	20	...	...	
	Bhadi do.	23	...	...	23	...	...	...	...	
	Other do.	59,235	...	...	59,235	1,485	57,750	...	...	
	Jarool trees	48	...	...	48	48	...	...	...	
	Do. posts	10	...	...	10	10	...	...	...	
	Tun do.	18	...	...	18	18	...	...	...	
	House do.	17,050	...	...	17,050	...	17,050	...	...	
	Saplings	12,516	...	...	12,516	...	12,516	...	...	
	Jarool pieces	4	...	...	4	...	4	...	...	
	Nagessur do.	18	...	...	18	18	...	...	...	
	Other do.	6	...	...	6	...	6	...	...	
	Scantlings, planks, beams, &c.									
	Jarool	2,964	...	...	2,964	...	2,964	...	...	
	Gamhar	1,304	...	...	1,304	...	1,304	...	...	
	Garjan	4,628	...	...	4,628	...	4,628	...	...	
	Chapalish	52	...	...	52	...	52	...	...	
	Telsur	10	...	...	10	...	10	...	...	
	Other	5,389	...	...	5,389	27	5,362	...	...	
	Jarool bakas	76	...	...	76	...	76	...	...	
	Total ...	293,389	...	...	293,389	8,837	284,552	...	...	
	Total Timber Unclassed State Forests	294,739	15,018	...	309,757	14,295	295,462	...	...	
	Fuel.									
Direction Division.	Firewood, drift	...	11,404	...	11,404	11,404	...	...	...	Bengal share of Gunduck drift.
Singbhoom subdivision (Chota Nagpur Division).	Firewood	...	106,916	...	106,916	...	106,916	...	...	
	Ditto	...	1,297	...	1,297	1,297	...	...	...	
	Charcoal	...	266	...	266	...	266	...	...	
	Total Fuel ...	...	108,479	...	108,479	1,297	107,182	...	...	
Chittagong Division.	Firewood	70,523	...	..	70,523	...	70,523	...	...	
	Total Fuel, Unclassed State Forests and Waste Lands.	70,523	119,883	...	190,406	12,701	177,705	...	...	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Outturn of Timber and Firewood during the year 1888-89—concluded.

Division.	Description of materials.	Outturn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.	Right-holders.	
		ABSTRACT OF THE CIRCLE.								
Reserved Forests.	Timber in scantling	2,789	4,167	...	6,956	6,552	396	8	...	
	Ditto in trees, poles, logs, &c.	8,362,051	13,777	68,630	8,444,458	53,746	8,378,522	12,190	...	
	Dry timber	17,910	71,375	...	89,285	3,818	82,264	3,203	...	
	Drift and confiscated timber...	...	5,557	...	5,557	182	5,375	...	...	
	Total Timber ...	8,382,750	94,876	68,630	8,546,256	64,298	8,466,557	15,401	...	
	Total Fuel ...	9,890,783	1,360,993	875,353	12,127,129	283,206	10,842,602	1,001,321	..	
Protected Forests.	Timber in scantling	...	1,270	...	1,270	...	120	1,150	...	
	Ditto in trees and poles, &c.	236,152	2,950	...	239,102	20	237,573	1,509	...	
	Total Timber ...	236,152	4,220	...	240,372	20	237,693	2,659	...	
	Total Fuel ...	669,200	5,710,384	...	6,379,584	...	3,379,416	3,000,168	...	
Unclassed State Forests and Waste Lands.	Timber in trees, poles, &c. ...	294,739	12,752	...	307,491	12,029	295,462	...	...	
	Ditto drift	...	2,266	...	2,266	2,266	...	...	...	
	Total Timber ...	294,739	15,018	...	309,757	14,295	295,462	...	...	
	Total Fuel ...	70,523	119,883	...	190,406	12,701	177,705	...	...	
	Grand Total Timber ...	8,913,641	114,114	68,630	9,096,385	78,613	8,999,712	18,060	...	
	Ditto Fuel ...	10,630,506	7,191,260	875,353	18,697,119	295,907	14,399,723	4,001,489	...	
	Grand Total Cubic Feet Wood.	19,544,147	7,305,374	943,983	27,793,504	374,520	23,399,435	4,019,549	...	

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89.

Division.	Description of Produce.	Produce Removed or Utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	RESERVED FORESTS.											
Darjeeling Division.	Khanukpa seed	...*	236	...	...	...	...	...	...	...*	236	* Quantity shown in Form No. 55 for 1887-88 under Darjeeling and Kurseong Sub-divisions. Ie, Rs. 236.
	Fodder—											
	One-month permits 4 ... ... Mds.	...	...	120	2	...	...	...	...	120	2	Actually belongs to Darjeeling Sub-division. IId, Rs. 7.
	Three-do. ditto 3 ... ... „	...	...	270	5	...	...	...	...	270	5	
	India-rubber ... ... „	...	...	49	785	...	...	...	...	49	785	Actually belongs to Teesta and Kurseong Sub-divisions. IIe, Rs. 785.
Darjeeling Sub-division (Darjeeling Division).	Khanukpa seed	...†	40	...	...	...	...	...	...	...†	40	† Quantity shown in 1887-88. Ie, Rs. 40.
	Maling bamboos ... ... No.	...	...	2,400	12	...	...	...	...	2,400	12	Estimated 600 bamboos per permit.
	One-month mat-makers' ... } Permit for ditto 435 } „	...	...	261,000	256	...	...	...	...	261,000	256	
	Compensation realized for illicit cutting.	...	...	20	1	...	...	...	...	20	1	IIc, Rs. 269.
	Fodder—											
	One-month permits 2,038 ... Mds.	...	...	61,110	1,019	...	...	...	...	61,110	1,019	
	Coolie loads 21 ... ... „	...	...	...	...	(a)21	...	...	...	21	...	(a) Supplied to Military Department free.
	Compensation realized for coolie loads 20. „	...	...	20	18	...	...	...	...	20	18	
	Cart loads 2 ... ... „	...	...	20	6	...	...	...	...	20	6	
	Grazing—											
	One-month permit for cows ... No.	...	...	3,557	1,782	...	...	...	...	3,557	1,782	
	Ditto ditto bullocks „	...	...	647	324	...	...	...	...	647	324	
	Three-month ditto cows ... „	...	...	644	367	...	...	...	...	644	367	
	Ditto ditto buffaloes „	...	...	50	49	...	...	...	...	50	49	
	Ditto ditto sheep ... „	...	...	1,631	204	...	...	...	...	1,631	204	
	Compensation realised for grazing—											
	Cows ... ... No.	...	...	159	202	...	...	...	...	159	202	
	Bullocks ... ... „	...	...	47	67	...	...	...	...	47	67	
	Buffaloes ... ... „	...	...	26	52	...	...	...	...	26	52	
	Calves ... ... „	...	...	2	1	...	...	...	...	2	1	
	Ponies ... ... „	...	...	6	20	...	...	...	...	6	20	Of this Rs. 10 received from the court.
	Sheep ... ... „	...	...	281	71	...	...	...	...	281	71	
	Goats ... ... „	...	...	6	3	...	...	...	...	6	3	IId, Rs. 4,185.
	Cane 36 coolie loads ... ... Mds.	...	...	36	16	...	...	...	...	36	16	
	Do. 15 monthly permit ... ... „	...	...	450	90	...	...	...	...	450	90	
	Seedlings and plants (2,186) ...	...	...	...	100	...	...	...	...	...	100	
	Jungle sticks ... ... Mds.	...	...	300	4	...	...	...	...	300	4	
	Do. 3 coolie loads (estimated) „	...	...	6	2	...	...	...	...	6	2	
	Fencing sticks 5 coolie-loads ... „	...	...	5	1	...	...	...	...	5	1	
	Moss 36 baskets ... ... „	...	...	36	10	...	...	...	...	36	10	
	Wax and honey ... ... „	...	...	103	92	...	...	...	...	103	92	
	Champ seed ... ... „	...	...	1	6	...	...	...	...	1	6	
	Miscellaneous	...	...	...	1	...	...	...	...	...	1	IIe, Rs. 322.
Teesta Sub-division (Darjeeling Division).	Bamboos	...	...	96,394	853	} ...	...	...	...	96,424	854	{ IIc, Rs. 853.
	Ditto (confiscated)	30	1	...	...							{ III (part), Re. 1.
	Fodder—											
	One-month permits 837 ... ... Mds.	...	...	25,110	209	...	...	...	...	25,110	209	
	Coolie loads 299 ... ... „	...	...	299	5	...	...	...	...	299	5	
	Compensation for illicit removal „	...	...	2	...	...	...	...	...	2	...	
	Grazing—											
	One-month permits for cows ... No.	...	...	3,519	440	...	...	...	...	3,519	440	
	Ditto ditto bullocks „	...	...	370	46	...	...	...	...	370	46	
	Ditto ditto buffaloes „	...	...	1,183	444	...	...	...	...	1,183	444	
	Ditto ditto ponies ... „	...	...	26	3	...	...	...	...	26	3	
	Ditto ditto sheep ... „	...	...	6	...	...	...	...	...	6	...	
	Ditto ditto goats ... „	...	...	76	10	...	...	...	...	76	10	
	Three-month ditto cows ... „	...	...	3,346	418	...	...	...	...	3,346	418	
	Ditto ditto bullocks „	...	...	2	...	...	...	...	...	2	...	
	Ditto ditto buffaloes „	...	...	412	103	...	...	...	...	412	103	
	Ditto ditto ponies „	...	...	29	4	...	...	...	...	29	4	
	Ditto ditto sheep .. „	...	...	50	3	...	...	...	...	50	3	
	Ditto ditto goats ... „	...	...	6	...	...	...	...	...	6	...	
	Twelve-month ditto cows ... „	...	...	...	...	130	195	...	...	130	195	
	Ditto ditto ponies „	...	...	...	...	4	6	...	...	4	6	
	Compensation for illicit grazing cows. „	...	...	378	185	...	...	...	...	378	185	
	Ditto ditto bullocks „	...	...	4	2	...	...	...	...	4	2	
	Ditto ditto buffaloes „	...	...	215	105	...	...	...	...	215	105	
	Compensation for grazing ponies „	...	...	6	2	...	...	...	...	6	2	
	Ditto ditto goats „	...	...	63	12	...	...	...	...	63	12	
	Ditto ditto pigs „	...	...	5	3	...	...	...	...	5	3	
	Short realised in 1887-88 „	...	...	...	1	...	...	...	...	...	1	IId, Rs. 1,995 Free grants, Rs. 201.
	Thatch grass, coolie loads 4,681 Mds.	...	...	4,681	71	...	...	...	...	4,681	71	
	Cane ditto ... 103 „	...	...	103	51	...	...	...	...	103	51	
	Hardi roots ditto ... ... 80 „	...	...	80	5	...	...	...	...	80	5	
	Lime ... ... „	...	...	995	249	...	...	...	...	995	249	
	Khanukpa seeds ... ... „	...	...	2	...	...	...	...	...	2	...	
	Kabra leaves, coolie loads 5 „	...	...	5	1	...	...	...	...	5	1	
	Plantain do., ditto ... 33 „	...	...	33	1	...	...	...	...	33	1	
	Borla do., ditto ... 211 „	...	...	211	8	...	...	...	...	211	8	
	Palm do., ditto ... 80 „	...	...	80	7	...	...	...	...	80	7	
	Broom grass, ditto ... 11 „	...	...	11	3	...	...	...	...	11	3	
	Red soil baskets, ditto ... 267 „	...	...	267	4	...	...	...	...	267	4	IIe, Rs. 400.

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89—continued.

Division.	Description of Produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
					RESERVED FORESTS—*continued.*							
Kurseong Sub-division (Darjeeling Division).	Bamboos	80	31	54,206	2,018	...	...	...	...	54,286	2,049	Ic, Rs. 31. IIc, Rs. 1,892. Outstanding, Rs. 126.
	Fodder—											
	Coolie loads ... ... Mds.	...	...	22,658	354	...	...	...	...	22,658	354	
	Elephant loads ... ... „	...	...	2,160	36	...	...	...	...	2,160	36	
	Compensation for illicit removal „	...	...	12	20	...	...	...	...	12	20	
	Grazing—											
	One-month permits for cows ... No.	...	...	695	207	...	...	...	...	695	207	
	Ditto ditto bullocks „	...	...	235	44	...	...	...	...	235	44	
	Ditto ditto buffaloes „	...	...	681	170	...	...	...	...	681	170	
	Ditto ditto ponies... „	...	...	2	...	...	...	...	...	2	...	
	Two-month ditto cows ... „	...	...	2	1	...	...	...	...	2	1	
	Compensation for illicit grazing—											
	Cows ... ... No.	...	...	122	155	...	...	...	...	122	55	
	Calves ... ... „	...	...	7	5	...	...	...	...	7	5	
	Bullocks ... ... „	...	...	18	18	...	...	...	...	18	18	
	Buffaloes ... ... „	...	...	101	108	...	...	...	...	101	108	
	Goats and sheep ... ... „	...	...	40	23	...	...	...	...	40	23	IId, Rs. 1,141.
	Champ seed ... ... Mds.	9	23	...	...	...	...	...	...	9	23	Used by Department— 4 Mds., Rs. 11.
	Buk do. ... ... „	7	14	...	...	...	...	...	...	7	14	2 Mds., Rs. 4.
	Kawala do. ... ... „	3	6	...	...	...	...	...	...	3	6	Ie, Rs. 28.
	Thatch grass ... ... Mds.	...	...	10,284	312	...	...	...	...	10,284	312	
	Broom do. ... ... „	...	...	6	2	...	...	...	...	6	2	
	Cane ... ... „	...	...	25	66	...	...	...	...	25	66	
	Borla leaves ... ... „	...	...	153	1	...	...	...	...	153	1	
	Goicha creepers ... ... „	...	...	20	1	...	...	...	...	20	1	
	Orchids ... ... „	...	...	2	1	...	...	...	...	2	1	
	Stone, 16 cart loads ... ... „	...	...	160	2	...	...	...	...	160	2	IIe, Rs. 385.
Julpigori Sub-division (Julpigori Division).	Bamboos ... ... „	...	...	200	4	...	...	...	...	200	4	IIc, Rs. 4.
	Grazing— Compensation for illicit grazing 53 buffaloes. No.	...	...	53	53	...	...	...	...	53	53	IId, Rs. 53.
	Thatch grass ... ... Mds.	...	...	10,800	174	...	...	...	...	10,800	174	
	Khagra do. ... ... „	...	...	260	8	...	...	...	...	260	8	
	Goicha leaves ... ... „	...	...	990	66	...	...	...	...	990	66	
	Long pepper ... ... „	...	...	36	9	...	...	...	...	36	9	
	Odal bark ... ... „	...	...	25	3	...	...	...	...	25	3	IIe, Rs. 260.
Buxa Sub-division (Julpigori Division).	Bamboos ... ... „	...	...	1,450	17	...	...	...	...	1,450	17	IIc, Rs. 17.
	Grazing—											
	One-month permits for cows ... No.	...	...	71	7	...	...	...	...	71	7	
	Ditto ditto buffaloes „	...	...	1,786	273	...	...	...	...	1,786	273	
	One-day permits for elephants „	...	...	1,071	75	...	...	...	...	1,071	75	IId, Rs. 355.
	Thatch grass ... ... Mds.	...	...	5,076	78	...	...	...	...	5,076	78	
	Khagra and madhua grass ... „	...	...	...	...	1,637	26	...	...	1,637	26	
	Cane ... ... „	...	...	12	...	61	15	...	...	73	15	
	Leaves for thatching ... ... „	...	...	46	1	...	...	...	...	46	1	
	Pepul fruits ... ... „	...	...	9	120	...	...	...	...	9	120	
	Mango do. ... ... „	...	...	2	8	...	...	...	...	2	8	
	Jack do. ... ... „	...	...	70	5	...	...	...	...	70	5	
	Compensation for removing one jack fruit. „	...	...	1	1	...	...	...	...	1	1	IIe, Rs. 213. Free grants, Rs. 41.
Palamow Sub-division (Chota Nagpore Division).	Bamboos ... ... „	964,936	9,650*	12,025	41	...	...	...	...	976,961	9,691	Ic, Rs. 3,009.
	Compensation for damaging do. „	...	...	50	1	...	...	...	...	50	1	IIc, Rs. 42.
	Grazing—											
	One-month permits for grazing cows. No.	...	...	1,018	32	...	...	...	...	1,018	32	
	Ditto ditto buffaloes „	...	...	3,419	219	...	...	...	...	3,419	219	
	Ditto ditto calves „	...	...	177	5	...	...	...	...	177	5	
	One and-a-half-month ditto cows „	...	...	6	...	...	...	...	...	6	...	
	Ditto ditto buffaloes „	...	...	154	14	...	...	...	...	154	14	
	Two-month ditto cows „	...	...	560	35	...	...	...	...	560	35	
	Ditto ditto buffaloes „	...	...	977	122	...	...	...	...	977	122	
	Ditto ditto calves „	...	...	38	2	...	...	...	...	38	2	
	Two and-a-half-month ditto buffaloes. „	...	...	13	18	...	...	...	...	13	18	
	Three-month ditto ditto ... „	...	...	316	59	...	...	...	...	316	59	
	Ditto ditto calves ... „	...	...	39	4	...	...	...	...	39	4	
	Half-month ditto cows ... „	...	...	264	4	...	...	...	...	264	4	
	Ditto ditto buffaloes „	...	...	152	5	...	...	...	...	152	5	
	Compensation for illicit grazing cows. „	...	...	52	15	...	...	...	...	52	15	
	Ditto ditto buffaloes „	...	...	60	24	...	...	...	...	60	24	
	Ditto ditto calves ... „	...	...	4	2	...	...	...	...	4	2	IId, Rs. 560.
	Khur grass ... ... Mds.	...	...	192	3	...	...	...	...	192	3	
	Sabai „ ... ... „	...	...	352	11	...	...	...	...	352	11	
	Mahua flowers ... ... „	...	...	15	4	...	...	...	...	15	4	
	Illicit collection of honey 8 seers ...	...	...	...	2	...	...	...	...	...	2	
	Rent of trees for laying lac, paras Mds. 40 (estimated).	...	...	33	10	...	...	...	...	33	10	
	Mahua 121 „ ... ... „	...	...	104	30	...	...	...	...	104	30	
	Cutch „ ... ... „	...	25	50	119	...	...	...	...	50	144	Ie, Rs. 25 IIe, „ 179

* Approximate value—240,405 were sold for Rs. 3,009.

Form No. 55

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89—continued.

Division.	Description of Produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs	
					RESERVED FORESTS—*continued.*							
Hazaribagh Sub-division (Chota Nagpore Division.)	Bamboos ... ... No.	...	...	50,928	382	...	...	...	...	50,928	382	IIc, Rs. 382
	Fodder—											
	One-month permits 2,060 ... Mds.	...	...	2,060	13	...	...	...	...	2,084	13	
	Cart load 24 ... "	...	...	24								
	Grazing—											
	One-month permits for grazing buffaloes. No.	...	...	132	5	...	...	...	...	132	5	
	Ditto ditto cows and bullocks. "	...	...	506	8	...	...	...	...	506	8	
	Three-month permits for grazing buffaloes.	...	...	9	1	...	...	...	...	9	1	
	Ditto ditto cows and bullocks. "	...	...	24	1	...	...	...	...	24	1	
	One-day permit for stall feeding buffaloes. "	...	...	72	1	...	...	...	...	72	1	
	Ditto ditto bullocks. "	...	...	1,043	16	...	...	...	...	1,043	16	
	Compensation for illicit grazing—											
	Buffaloes ... ... No.	...	...	16	17	...	...	...	...	16	17	
	Cows and bullocks ... ... "	...	...	9	2	...	...	...	...	9	2	
	Goat ... ... "	...	...	1	...	...	...	...	...	1	...	IId, Rs. 64
	Silk cocoons (1,400) ... ... Mds.	1	34	...	...	...	...	...	...	1	34	
	Thatch grass ... ... "	...	...	2,263	44	...	...	...	...	2,263	44	
	Sabai " ... ... "	...	...	1,500	300	...	...	...	...	1,500	300	
	Fencing thorns ... ... "	...	...	80	1	...	...	...	...	80	1	
	One-month permit for leaves for plates 8. "	...	...	120	4	...	...	...	...	120	4	
	Konyar, &c., leaves ... ... "	...	...	66	2	...	...	...	...	66	2	
	Chope fibre ... ... "	...	...	20	3	...	...	...	...	20	3	
	Mahua flowers ... ... "	...	...	800	100	...	...	...	...	800	100	
	Harra fruits ... ... "	...	...	20	20	...	...	...	...	20	20	
	Jack fruits (estimated) ... ... "	...	...	1	2	...	...	...	...	1	2	
	Mango " ... ... "	...	...	2						2		
	Wild plum ... ... "	...	...	32	2	...	...	...	...	32	2	
	Tamarind fruits ... ... "	...	...	1	1	...	...	...	...	1	1	
	Kend creeper roots ... ... "	...	...	8						8		
	Rent of one kusum tree for laying lac (estimated). "	...	...	1						1		
	Rent of 101 mica mines, estimated yield in maunds ... "	...	...	400	724	...	...	...	...	400	724	
	Rent for prospecting mica mines for six months, estimated yield in maunds. "	...	...	20	70	...	...	...	...	20	70	Ie, Rs. 34 IIe, " 1,273
Singbhoom Sub-division (Chota Nagpore Division) Reserved Forests.	Bamboos	5,175	78*	47,005	146	...	...	...	...	52,180	224	* Approximate value.
	Grazing—											10,092 were sold for Rs. 120 Outstanding realized Re. 1
	One-month permits for grazing cows. No.	...	...	156	2	...	...	...	...	156	2	Ic, Rs. 121
	Ditto ditto buffaloes. "	...	...	2,064	65	...	...	...	...	2,064	65	IIc, " 146
	Two-month ditto cows. "	...	...	120	4	...	...	...	...	120	4	
	Ditto ditto buffaloes. "	...	...	1,189	74	...	...	...	...	1,189	74	
	Three-month ditto buffaloes. "	...	...	508	48	...	...	...	...	508	48	
	Four-month ditto buffaloes. "	...	...	519	65	...	...	...	...	519	65	
	Ditto ditto cows. "	...	...	20	1	...	...	...	...	20	1	
	Five-month ditto buffaloes. "	...	...	205	32	...	...	...	...	205	32	
	Six-month ditto buffaloes. "	...	...	123	23	...	...	...	...	123	23	
	Ten-month ditto buffaloes. "	...	...	40	12	...	...	...	...	40	12	
	Compensation for illicit grazing cattle. "	...	...	112	10	...	...	...	...	112	10	IId, Rs. 336
	Thatch grass ... ... Mds.	...†	39	10,045	83	...	...	...	...	10,045	122	† 50 maunds were sold for Rs. 39
	Sabai do. ... ... "	8	(a) 5	2,160	120	...	...	...	...	2,177	123	(a) Approximate value 10 maunds were sold for Rs. 3.
	Do. do. confiscated ... "	9										
	Kusum seed ... ... "	...	...	5	1	...	...	...	...	5	1	
	Slate stone ... ... "	...	...	160	15	...	...	...	...	160	15	
	Lime ... ... "	...	...	50	5	...	...	...	...	50	5	
	Brushwood (estimated) ... "	...	...	50	2	...	...	...	...	50	2	
	Iron ore ... ... "	...	...	356	22	...	...	...	...	356	22	
	Udal fibre ... ... "	...	...	3	...	...	...	...	...	3	...	
	Silk cocoons 904 ... ... "	3	103	...	1	...	...	...	...	3	104	
	Do. confiscated 81 ... ... "	...	5	...	...	...	...	...	...	...	5	
	Compensation realized for :—											
	Chope creeper ... ... "	...	...	1	1	...	...	...	...	1	1	
	Burning grass jungle ... "	...	...	...	128	...	...	...	...	...	128	Ie (including Rs. 125 outstanding realized), Rs. 270
Sunderbunds Division.	Golpatta ... ... Mds.	...	...	3,039,936	47,499	...	...	...	...	3,039,936	47,499	IIe, (Part) " 378
	Shells ... ... "	...	...	65,792	1,028	...	...	...	...	65,792	1,028	III, (") " 5
	Hental ... ... "	...	...	3,648	57	...	...	...	...	3,648	57	
	Null ... ... "	...	...	93,824	1,466	...	...	...	...	93,824	1,466	
	Cane ... ... "	...	...	3,008	47	...	...	...	...	3,008	47	
	Wax and honey ... ... "	...	...	10,062	5,031	...	...	...	...	10,062	5,031	IIe, (Part) " 55,128
	&c.											

Form No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89—continued.

Division.	Description of Produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grant. Quantity.	By free grant. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	RESERVED FORESTS—*concluded*.											
Chittagong Division.	Kalisury bamboos ... ... No.	...	...	2,190	7	...	...	...	...	2,190	7	
	Muli ditto ... ... ,,	...	...	2,447,537	7,343	...	...	...	...	2,447,537	7,343	
	Dolu ditto ... ... ,,	...	...	37,739	113	...	...	...	...	37,739	113	
	Other ditto compensation ,,	...	...	8	2	...	...	...	...	8	2	IIc (Part), Rs. 7,465
	Canes estimated ... ... Mds.	...	...	3,170	1,071	...	...	...	...	3,170	1,071	
	Sun-grass estimated ... ... ,,	...	...	2,223	327*	2,000	240	...	...	4,223	567	
	Kuruchpat (leaves) ... ... ,,	...	...	83	5	...	...	...	...	83	5	
	Bamboos ... ... No.	58,000	†363	558,763	1,834	1,200	4	...	...	617,963	2,201	
	Ditto (confiscated) ... ... ,,	...	...	760	2	...	...	...	...	760	2	
	Grazing—											
	One-month permits for grazing cows. No.	...	...	83	5	...	...	...	...	83	5	
	Ditto ditto bullocks. ,,	...	...	171	11	...	...	...	...	171	11	
	Ditto ditto buffaloes. ,,	...	...	3,374	316	...	...	...	...	3,374	316	
	Ditto ditto calves. ,,	...	...	819	38	...	...	...	...	819	38	
	Two-month permits for cows ,,	...	...	78	10	...	...	...	...	78	10	
	Ditto ditto bullock ,,	...	...	1	...	...	...	...	...	1	...	
Orissa Division (Reserved Forests).	Two-month permits for grazing buffaloes. No.	...	...	109	21	...	...	...	...	109	21	
	Ditto ditto calves ,,	...	...	26	3	...	...	...	...	26	3	
	Five-month ditto buffaloes ,,	...	...	2	1	...	...	...	...	2	1	
	Six-month ditto ditto ,,	...	...	16	8	...	...	...	...	16	8	
	Compensation for illicit grazing of— Buffaloes ... ... ,,	...	...	142	58	...	...	...	...	142	58	
	Cows and bullocks ... ,,	...	...	165	39	...	...	...	...	165	39	
	Calves ... ... ,,	...	...	27	3	...	...	...	...	27	3	
	Cattle grazed in the reserved forests under Conservator's order No. 96T.P.—O, dated 8th November 1888—											
	One-month permits ... ... ,,	...	...	...	...	1,103	1,388	...	...	11,103	1,388	IId (Part), Rs. 513. Free grants, Rs. 1,388.
	Siali-Nai (creepers) ... ... Mds.	...	...	200	5	...	...	...	...	200	5	
	Thatch grass ... ... ,,	...	...	9,502	174	...	...	...	...	9,502	174	
	Joon do. ... ... ,,	...	...	144	6	...	...	...	...	144	6	
	Cane ... ... ,,	...	...	264	66	...	...	...	...	264	66	
	Iron ore ... ... ,,	...	...	1	1	6	3	...	...	7	4	
	Red clay ... ... ,,	...	...	75	1	...	...	...	...	75	1	
	Laterite ... ... ,,	...	...	100,825	228	...	...	...	...	100,825	228	
	Thorns and brushwood ... ... ,,	...	...	60	2	...	...	...	...	60	2	
	Honey ... ... ,,	...	...	1	5	...	...	...	...	1	5	
	Harido bark ... ... ,,	...	...	32	2	...	...	...	...	32	2	
	Karanj seeds ... ... ,,	...	...	6	1	...	...	...	...	6	1	
	Kochila fruits ... ... ,,	...	...	208	13	...	...	...	...	208	13	
	Mango ... ... ,,	...	...	506	95	...	...	...	...	506	95	
	Kendu fruit ... ... ,,	...	...	24	1	1,002	209	...	...	1,026	210	
	Pani aloo ... ... ,,	...	...	...	...	409	26	...	...	409	26	
	Karba aloo ... ... ,,	...	...	...	...	4	8	...	...	4	8	
	Aula fruits ... ... ,,	...	...	...	...	25		...	...	25		
	Cotton (16 seers)	...	...	...	1	...	...	...	...	...	1	
	Gold ($\frac{1}{2}$ tola 10 per cent. on Rs. 4.)	...	...	...	...	...	...	...	...	...	...	
	Ivory, two pieces ($2\frac{3}{4}$ seers)	...	23	...	...	...	...	...	...	...	23	IIe (Part), Rs. 601. Vc ,, ,, 23. Free grants, ,, 246.
	PROTECTED FORESTS.											
Sunderbans Division.	Golpatta ... ... Mds.	...	...	40,768	637	...	...	...	...	40,768	637	
	Shells ... ... ,,	...	...	52,800	825	...	...	...	...	52,800	825	
	Hental ... ... ,,	...	...	99,584	1,556	...	...	...	...	99,584	1,556	
	Null ... ... ,,	...	...	91,712	1,433	...	...	...	...	91,712	1,433	
	Cane ... ... ,,	...	...	768	12	...	...	...	...	768	12	
	Wax and honey ... ... ,,	8	...	3,150	1,575	...	...	...	...	3,158	1,575	IIe ... ... Rs. 6,038
	Add—Revenue under IIe, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	,, 55,128
	Total revenue of the Division under IIe.	...	...	...	...	...	...	...	...	...	...	,, 61,166
Orissa Division (Protected Forests).	Bamboos ... ... No.	...	...	101,109	199	3,780,250 160	7,088†	...	...	3,881,519	7,287	† Approximate value. Includes removals by Government ryots. Free grants ... ... Rs. 7,088
	Add—Revenue under IIc, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	IIc (part) ... ... Rs. 199
	Total revenue of the Division under IIc.	...	...	...	...	...	...	...	...	...	...	,, 1,834
	Grazing—											,, 2,033
	One-month permits for grazing buffaloes. No.	...	...	33	6	69,276	6,495	...	...	69,309	6,501	Figures under free grants represent Government ryots' cattle grazed on their 4-anna annual house licenses. Value calculated at half existing sanctioned rates for outsiders
	Two-month ditto ditto ... ,,	...	...	78	29	...	...	...	...	78	29	
	Four-month ditto ditto ... ,,	...	...	89	67	...	...	...	...	89	67	
	One-month ditto goats ... ,,	...	...	...	...	63,456	5,949	...	...	63,456	5,949	
	Ditto ditto sheep ... ,,	...	...	...	...	21,864	683	...	...	21,864	683	
	Ditto ditto bulls and bullocks. ,,	...	...	...	...	711,012	44,438	...	...	711,012	44,438	

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89—continued.

Division	Description of Produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	PROTECTED FORESTS—*concluded.*											
Orissa Division (Protected Forests)—*concluded.*	One-month permits for grazing cows No.	...	...	...	...	699,360	43,710	...	...	699,360	43,710	
	Ditto ditto horses and ponies. „	...	...	...	...	2,592	162	...	...	2,592	162	Free grants ... Rs. 1,01,437
	Add—Revenue under II*d*, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	II*d* (part) ... ... Rs. 102
	Total revenue of the Division under II*d*.	...	...	...	...	...	...	...	...	...	...	„ 513
												„ 615
	Laterite, 151,576 c. ft., estimated Mds.	...	...	207,114	420	20,220	68	...	...	227,334	488	Free grants to Khorda Government ryots.
	Sandstone, 4,175c. ft. do. ... „	...	...	2,262	6	3,600	12	...	...	5,862	18	Ditto ditto.
	Lime ghooting, 2,663 do. do. ... „	...	...	3,994	27	...	...	...	...	3,994	27	
	Limestone, 150 do. do. ... „	...	...	...	...	225	1	...	...	225	1	Ditto ditto.
	White stone, 5,550 do. do. ... „	...	...	7,572	25	750	3	...	...	8,322	28	Ditto ditto.
	White clay, 1,175 do. do. ... „	...	...	1,763	12	...	...	...	...	1,763	12	
	Red clay, 225 do. do. ... „	...	...	337	2	...	...	...	...	337	2	
	Hard stone, 54,875 do. do. ... „	...	...	82,312	115	...	...	...	...	82,312	115	
	Dhinna or rubble, 500 do. do. ... „	...	...	750	3	...	...	...	...	750	3	
	Road metal, 430,878 do. do. ... „	...	...	646,117	1,077	...	...	...	...	646,117	1,077	
	Brand stone, 50 do. do. ... „	...	...	75		...	...	...	...	75		
	Cane ... ... „	...	...	61	15	...	...	...	...	61	15	
	Kamila-gundi powder ... ... „	...	...	32	20	...	...	...	...	32	20	
	Osta bark ... ... „	...	...	24	9	...	...	...	..	24	9	
	Fruits of sorts ... ... „	...	...	6,131	393	...	...	...	...	6,131	393	
	Date leaves ... ... „	...	...	88	1	...	...	...	...	88	1	
	Thorns and creepers ... ... „	...	...	1,270	25	1,890,125	29,533	...	...	1,891,395	29,558	Ditto ditto
	Jhatties (brushwood) ... ... „	...	...	565	18	1,890,125	59,066	...	...	1,890,690	59,084	Free grants ... Rs. 88,683
	Add—Revenue under II*e*, Reserved Forests „	...	...	...	...	...	...	...	...	...	...	II*e* (part) ... „ 2,168
	Total revenue of the Division under II*e*. „	...	...	...	...	...	...	...	...	...	...	„ 601
												„ 2,769
	UNCLASSED STATE FORESTS AND WASTE LANDS.											
Singbhoom Sub-divn. (Chota Nagpore Divn.)	Thatch grass (estimated) ... Mds.	...	...	495	10	...	...	...	...	495	10	
	Brushwood ditto ... ... „	...	...	28	...	...	...	...	...	28	...	II*e* ... ... Rs. 10
	Add—Revenue under II*e*, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	„ 378
	Total revenue of the Division under II*e*.	...	...	...	...	...	...	...	...	...	...	„ 388
Chittagong Division.	Orah* bamboos ... ... No.	...	...	6,380	20	...	...	...	...	6,380	20	
	Mitinga ditto ... ... „	...	...	9,255	27	...	...	...	...	9,255	27	
	Dolu ditto ... ... „	...	...	795,686	2,222	...	...	...	...	795,686	2,222	Including preliminary pass fees proportionately distributed.
	Muli ditto ... ... „	...	...	10,115,263	27,375	...	...	...	...	10,115,263	27,375	
	Khaya ditto ... ... „	...	...	4,200	3	...	...	...	...	4,200	3	
	Other ditto ... ... „	...	...	3,150	8	...	...	...	...	3,150	8	
	Deduct—											
	Amount paid to Maharaja, Hill Tipperah.	...	...	...	...	...	...	...	...	...	...	II*c* (part)... ... Rs. 29,655
	II*c*.—Unclassed State forests and waste lands, nett.	...	...	...	...	...	...	...	...	...	...	„ 4,789
	Add—Revenue under II*c*, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	„ 24,866
												„ 7,465
	Total revenue of the Division under II*c*.	...	...	...	...	...	...	...	...	...	...	„ 32,331
	Canes (estimated) ... ... Mds.	...	...	13,866	2,488	...	...	...	...	13,866	2,448	
	Do. confiscated ... ... „	10	17*	...	...	...	...	...	...	10	17	Including preliminary pass fees proportionately distributed.
	Sun grass (estimated) ... ... „	...	...	175,586	7,025	...	...	...	...	175,586	7,025	*III ... ... Rs. 240
	Kurruchpat (leaves) ... ... „	...	...	5,671	491	...	...	...	...	5,671	491	
	Gurjun oil ... ... „	...	...	74	59	...	...	...	...	74	59	II*e* (part) ... Rs. 10,063
	Two elephant tusks (59¾ lbs.) ... „	1	223*	...	...	...	...	...	...	1	223	
	Deduct—											
	Amount paid to Maharaja, Hill Tipperah.	...	...	...	...	...	...	...	...	...	..	„ 1,720
	II*c*.—Unclassed State forests and waste lands, nett.	...	...	...	...	...	...	...	...	...	...	„ 8,343
	Add—Revenue under II*e*, Reserved Forests.	...	...	...	...	...	...	...	...	...	...	„ 1,403
	Total revenue of the Division under II*e*.	...	...	...	...	...	...	...	...	...	...	„ 9,746
	ABSTRACT OF THE CIRCLE.											
	Bamboos.											
	Reserved forests ... ... No.	1,028,221	10,123	3,572,675	13,032	1,200	4	...	...	4,602,096	23,159	Revenue II*c* ... Rs. 12,904
												Outstanding ... „ 126
												Drift ... „ 2
	Protected forests ... ... „	...	...	101,109	199	3,780,410	7,088	...	...	3,881,519	7,287	Revenue II*c* ... „ 199
	Unclassed, &c., forests ... ... „	...	...	10,933,934	29,655	...	...	...	...	10,933,934	29,655	
	Grand Total, Bamboos ... „	1,028,221	10,123	14,607,718	42,886	3,781,610	7,092	...	...	19,417,549	60,101	Ditto gross ... „ 29,655
												Less amount paid to Maharaja, Hill Tipperah ... „ 4,789
												Net ... „ 24,866
	RESERVED FORESTS.											
	* *Grazing and fodder grass.*											
	Grazing—											
	One-month permits for cows No.	...	...	22,810	3,315	1,560	195	...	...	24,370	3,510	
	Ditto ditto bullocks „	...	...	3,831	723	...	...	...	...	3,831	723	
	Ditto ditto buffaloes „	...	...	23,975	1,875	...	...	...	...	23,975	1,875	
	Ditto ditto calves „	...	...	1,235	52	...	...	...	...	1,235	52	
	Ditto ditto ponies „	...	...	115	7	48	6	...	...	163	13	
	Ditto ditto sheep „	...	...	5,049	207	...	...	...	...	5,049	207	
	Ditto ditto goats „	...	...	94	10	...	...	...	...	94	10	
	Ditto ditto elephants „	...	...	36	75	...	...	...	...	36	75	
	Ditto ditto not specified. „	...	...	...	...	11,103	1,388	...	...	11,103	1,388	
	Compensation accepted for illicit grazing. „	...	...	2,127	1,258	...	...	...	...	2,127	1,258	
	Total Grazing, Reserved Forests. „	...	...	59,272	7,522	12,711	1,589	...	...	71,983	9,111	Revenue under II*d* :— Grazing (part) ... Rs. 7,522

* For purpose of this abstract of grazing and fodder grass, permits for grazing issued for various periods have been reduced to and are expressed in their [illegible] permits. The unit is therefore one animal grazed for one month, and the number here given if divided by 12 will give the average number of [illegible] during the year.

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1888-89—continued.

Divisions.	Description of Produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
		ABSTRACT OF THE CIRCLE—*concluded.*										
		PROTECTED FORESTS.										
	Grazing and fodder grass—contd.											
	One-month permits for cows ... No.	...	...	...	...	699,360	43,710	...	...	699,360	43,710	
	Ditto ditto bulls and bullocks. „	...	...	...	...	711,012	44,438	...	...	711,012	44,438	
	Ditto ditto buffaloes „	...	...	545	102	69,276	6,495	...	...	69,821	6,597	
	Ditto ditto horses and ponies. „	...	...	...	...	2,592	162	...	...	2,592	162	
	Ditto ditto sheep ... „	...	...	...	...	21,864	683	...	...	21,864	683	
	Ditto ditto goats .. „	...	...	...	...	63,456	5,949	...	...	63,456	5,949	
	Total Grazing, Protected Forests. „	...	...	545	102	1,567,560	1,01,437	...	...	1,568,105	1,01,539	Grazing (part) ... Rs. 102
	Grand Total Value Grazing ... Rs.	...	...	...	7,624	...	1,03,026	...	...	...	1,10,650	Grazing ... ... „ 7,624
		RESERVED FORESTS.										
	Other Minor Produce.											
	Fodder ... ... Mds.	...	...	113,865	1,687	21	...	...	...	113,886	1,687	Revenue credited under II*d*. Total revenue under II*d*, Rs. 9,311.
	Cane ... ... „	...	...	7,068	1,407	61	15	...	...	7,129	1,422	
	Thatch and other grasses ... „	...	...	55,487	1,413	3,637	266	...	...	59,124	1,679	
	Sabai grass ... ... „	17	5	4,012	431	...	...	...	...	4,029	436	
	Leaves (thatching and other) ... „	...	...	1,787	96	...	...	...	...	1,787	96	
	Null ... ... „	...	...	93,824	1,466	...	...	...	...	93,824	1,466	
	Golpatta ... ... „	...	...	3,039,936	47,499	...	...	...	...	3,039,936	47,499	
	Hental ... ... „	...	...	3,648	57	...	...	...	...	3,648	57	
	Shells for lime ... ... „	...	...	65,792	1,028	...	...	...	...	65,792	1,028	
	Lime ... ... „	...	...	1,045	254	...	...	...	...	1,045	254	
	India-rubber... ... ... „	...	...	49	785	...	...	...	...	49	785	
	Cutch ... ... „	...	25	50	119	...	...	...	...	50	144	
	Bark, orchids, resin, fibres, roots and moss. „	...	...	206	25	...	...	...	...	206	25	
	Thorns, creepers, stakes, and brambles. „	...	...	722	19	...	...	...	...	722	19	
	Laterite, &c. ... ... „	...	...	100,995	230	...	...	...	...	100,995	230	
	Mica ... ... „	...	...	420	794	...	...	...	...	420	794	
	Iron ore ... ... „	...	...	357	23	6	3	...	...	363	26	
	Slate stone .. .. „	...	...	160	15	...	...	...	...	160	15	
	Earth, clay, &c. ... ... „	...	...	342	5	...	...	...	...	342	5	
	Lac ... ... „	...	...	138	40	...	...	...	...	138	40	
	Mahua flowers ... ... „	...	...	815	104	...	...	...	...	815	104	
	Wax and honey ... ... „	...	...	10,166	5,130	...	...	...	...	10,166	5,130	
	Fruits and seeds ... ... „	19	83	926	285	1,440	243	...	...	2,385	611	
	Silk cocoons ... ... „	4	142	...	1	...	...	...	...	4	143	
	Ivory (3 seers) ... ... „	...	23	...	...	...	...	...	...	...	23	Minor Produce—
	Seedlings, &c. (2,186) ... ... „	...	...	...	101	...	...	...	...	...	101	Rs.
	Total Other Minor Produce, Reserved Forests ... ... „	40	278	3,501,800	63,014	5,165	527	...	...	3,507,005	63,819	Reserves ... ... 63,014 *Less*—Fodder ... ... 1,687 IIe.—Reserves ... 61,327
		PROTECTED FORESTS.										
	Cane ... ... Mds.	...	...	829	27	...	...	...	...	829	27	
	Leaves (thatching and other) ... „	...	...	88	1	...	...	...	...	88	1	
	Null ... ... „	...	...	91,712	1,433	...	...	...	...	91,712	1,433	
	Golpatta ... ... „	...	...	40,768	637	...	...	...	...	40,768	637	
	Hental ... ... „	...	...	99,584	1,556	...	...	...	...	99,584	1,556	
	Shells for lime ... ... „	...	...	52,800	825	...	...	...	...	52,800	825	
	Lime ... ... „	...	...	3,994	27	...	...	...	...	3,994	27	
	Osta bark ... ... „	...	...	24	9	...	...	...	...	24	9	
	Thorns, creepers, &c., and brushwood. „	...	...	1,835	43	3,780,250	88,599	...	...	3,782,085	88,642	
	Laterite, &c. ... ... „	...	...	946,202	1,646	24,795	84	...	...	970,997	1,730	
	Earth, clay, &c. ... ... „	...	...	2,100	14	...	...	...	...	2,100	14	
	Kamila gundi powder ... ... „	...	...	32	20	...	...	...	...	32	20	
	Wax and honey ... ... „	8	...	3,150	1,575	...	...	...	...	3,158	1,575	
	Fruit and seeds ... ... „	...	...	6,131	393	...	...	...	...	6,131	393	
	Total Other Minor Produce, Protected Forests ... ... „	8	...	1,249,249	8,206	3,805,045	88,683	...	...	5,054,302	96,889	Rs. IIe.—Protected 8,206
		UNCLASSED STATE FORESTS AND WASTE LANDS.										
	Cane ... ... Mds.	10	17	13,866	2,488	...	...	...	...	13,876	2,505	
	Thatch and other grasses ... „	...	...	176,081	7,035	...	...	...	...	176,081	7,035	
	Leaves (thatching and other) ... „	...	...	5,671	491	...	...	...	...	5,671	491	
	Brushwood ... ... „	...	...	28	...	...	...	...	...	28	...	
	Gurjun oil ... ... „	...	...	74	59	...	...	...	...	74	59	
	Ivory ... ... „	1	223	...	...	...	...	...	...	1	223	
	Total Other Minor Produce, Unclassed, &c., Forests ... „	11	240	195,720	10,073	...	...	...	...	195,731	10,313	Rs. IIe.—Unclassed ... ... 10,073 *Less*—Amount paid Maharaja, Hill Tipperah ... 1,720 Balance 8,353
	Grand Total of the Circle, Other Minor Produce. „	59	518	4,946,769	81,293	3,810,210	89,210	...	...	8,757,038	1,71,021	Total revenue credited under IIe 77,886

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally, during the year 1888-89.

TIMBER.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year—				
Darjeeling sub-division—				
Scantling buk	54	120		
„ phalat	18	27		
			72	147
Teesta sub-division—				
Poles	7	...	7	...
Kurseong sub-division—				
Scantling (various)	64	59	64	59
Buxa sub-division—				
Sâl logs	171	5,927		
„ sleepers (various)	4,719	6,385		
„ scantling	255	160		
„ pieces	76	614		
„ slabs	174	...		
„ posts	167	...	5,556	13,086
Singbhoom sub-division—				
Sâl sleepers, b. g.	3,037	9,470		
„ scantling	120	77		
Other „	1	9		
Sâl slabs	2	1		
„ poles	1,161	1,161		
Other poles	6	6		
Miscellaneous	4	4	4,331	10,728
Sunderbuns Division—				
Sundri logs	289	2,363		
Pussur „	3	7		
Ora „	1	20		
Teakwood piece	1	20		
Sundri planks	157	182		
Posts (various)	97	507		
Slabs and ends	45	...	593	3,099
Chittagong Division—				
Chapalish logs	1	92		
Chikarasi „	1	28		
Jarul „	26	820		
Other „	2	198		
Scantling	11	30		
Boats (various)	4	339		
Slabs	2	3		
Posts	33	82	80	1,592
Orissa Division—				
Sâl logs	73	1,870		
Scantling (various)	22	18		
Rafts, &c.	37	...	132	1,888
Total balance ...	...	...	10,835	30,599
Received from the forests in the sale depôts—				
Darjeeling sub-division—				
Scantling buk	106	189	106	189
Teesta sub-division—				
Sâl sleepers	230	307	230	307
Julpigori sub-division—				
Sâl logs	100	1,930	100	1,930
Buxa sub-division—				
Sâl logs	150	5,442		
„ sleepers	102	136		
Scantling, sâl	793	807		
„ sissu	863	431		
Champ planks	383	347		
Sâl pieces	8	96	2,299	7,259
Chittagong Division—				
Teak poles	522	1,550		
Kom „	131	262	653	1,812
Singbhoom sub-division—				
Scantling, sâl	250	201		
„ karam	7	5		
Planks, sâl	1,052	1,380		
„ karam	35	31		
Beams, sâl	353	1,552		
„ gamhar	2	14		
„ karam	3	13		
Sâl sleepers, b. g.	8	24		
Sâl slabs	50	41		
Sâl poles	772	772		
Other „	100	100	2,682	4,133

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchasers from sale depôt—				
Julpigori sub-division—				
Sâl logs	100	1,930	100	1,930
Buxa sub-division—				
Sâl logs	40	1,404		
„ sleepers (various)	573	759		
„ scantling	891	1,119		
„ pieces	62	130		
„ slabs	421	...		
„ posts	3	...		
Champ planks	369	343		
Sissu scantling	867	433	3,226	4,188
Singbhoom sub-division—				
Sâl sleepers, b. g.	1,078	3,386		
„ scantling	1,177	1,547		
„ slabs	54	45		
„ poles	939	939		
Miscellaneous	105	105		
„ scantling	51	65		
„ pieces	4	4	3,408	6,091
Sunderbuns Division—				
Sundri logs	560	4,035		
„ posts	2	5		
„ planks	17	5		
Pussur logs	3	7		
Amoor posts	5	5		
Goran „	24	24		
Ends	8	...		
Ora log	1	20		
Teakwood	1	20		
Sâl masts	2	20		
Sundri boats	8	...	631	4,141
Chittagong Division—				
Jarul logs	26	820		
Chikarasi „	1	28		
Other „	96	4,773		
Boats	61	4,027		
Posts	43	110		
Scantling	15	47		
Slabs	2	3		
Pieces	4	18	248	9,826
Orissa Division—				
Sâl logs	37	1,284		
Posts	24	4	61	1,288
Total removed by purchasers from sale depôts	...	...	7,674	27,464
Sold locally (as per contra)	...	...	8,793	43,353
Given up to claimants—				
Chittagong Division—				
Boat	1	76	1	76
Reduced on remeasurements—				
Buxa sub-division—				
Sâl logs	...	16	...	16
Singbhoom sub-division—				
Sâl plank	...	1		
„ beam	...	3		
Piasal beam	...	4		
Karam plank	...	2	...	10
Sunderbuns Division—				
Sundri logs	...	16		
„ planks	...	1	...	17
Total reduced on remeasurement ...	...	...	...	43
Written off as lost and used by Department—				
Darjeeling sub-division—				
Scantling, buk	90	159	90	159
Julpigori sub-division—				
Sâl pole	1	2	1	2

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally, during the year 1888-89—continued.

TIMBER—*continued.*

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Received from the forests in sale depôts—*concluded.*				
Orissa Division—				
Sâl logs	115	3,526		
„ posts	50	468		
Other „	8	4		
			173	3,998
Total received from the forests in sale depôts	...	...	6,193	19,628
Received from the forests and sold locally—				
Teesta sub-division—				
Sâl sleepers	203	270		
„ slabs	86	40		
„ logs	13	279		
Lampatia logs	2	47		
Kimboo „	3	54		
Burra „	1	4		
Boat	1	...		
			309	694
Kurseong sub-division—				
Sâl wood	2	21		
„ „ (confiscated)	1	8		
„ slabs	12	...		
„ poles	15	150		
Other „	3,664	36,640		
			3,694	36,819
Julpigori sub-division—				
Sâl logs (confiscated)	34	216		
Sidha „	1	63		
			35	279
Buxa sub-division—				
Sâl trees (drift)	2	...		
Sissu logs	2	25		
Sâl sleepers	14	14		
„ scantling	572	948		
„ pieces	31	238		
„ slabs	2,976	...		
Sissu pieces	16	54		
„ slabs	101	...		
			3,714	1,279
Singbhoom sub-division—				
Sâl sleepers	600	2,833		
„ beams	100	781		
„ planks	24	20		
„ slabs	99	99		
„ poles	7	7		
			830	3,740
Orissa Division—				
Sâl sleepers	19	67		
„ beams	9	135		
„ planks	19	13		
„ slabs	164	327		
			211	542
Total sold locally ...	...	...	8,793	43,353
Received by collection of drift in sale depôts—				
Julpigori sub-division—				
Sâl pole	1	2		
			1	2
Buxa sub-division—				
Sâl log	1	8		
			1	8
Sunderbuns Division—				
Sâl masts	2	20		
			2	20
Chittagong Division—				
Logs	84	3,472		
Tree	1	48		
Boats	57	3,778		
Poles	2	10		
			144	7,308
Total drift ...			148	7,338
Found in depôts—				
Singbhoom sub-division—				
Sâl scantling	13	...		
			13	...
Received by confiscation in depôts—				
Buxa sub-division—				
Sâl posts	3	...		
			3	...
Singbhoom sub-division—				
Sâl poles	20	20		
			20	20
Sunderbuns Division—				
Sundri logs	476	3,764		
Pussur „	3	7		
Sundri planks	4	1		
Teak „	44	9		
Sundri posts	2	5		
Roof beams	21	6		
Sundri boats	11	...		
			561	3,792

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Written off as lost and used by Department—*concluded.*				
Buxa sub-division—				
Sâl sleepers	1,052	1,499		
„ scantling	370	436		
„ slabs	2	...		
Sissu scantling	1	1		
Champ planks	14	4		
			1,439	1,940
Singbhoom sub-division—				
Sâl scantling	7	13		
„ planks	2	3		
„ slab	1	1		
„ poles	33	33		
Hessel poles	1	1		
			44	51
Sunderbuns Division—				
Sundri logs	75	656		
„ posts	68	478		
„ planks	172	195		
Slabs	37	...		
Teakwood pieces	2	1		
			354	1,330
Chittagong Division—				
Boat	1	625		
Chapalish log	1	92		
Scantling	4	6		
Teak poles	522	1,550		
Kom „	131	262		
			659	2,535
Total lost and used by Department ...	...	...	2,587	6,017
Rectification of error—				
Sunderbuns Division—				
Sundri logs	42	480		
			42	480
Converted in depôts—				
Buxa sub-division—				
Sâl logs	45	462		
„ pieces	49	473		
			94	1,935
Singbhoom sub-division—				
Sâl beams	8	137		
„ poles	10	10		
Gambar beam	1	10		
			19	157
Sunderbuns Division—				
Sundri logs	7	109		
			7	109
Total converted in depôts	...	...	120	2,201
Transferred to other sale depôts (as per contra)	...	...	435	2,038
Balance at close of the year—				
Darjeeling sub-division—				
Scantling, buk	70	150		
„ phalat	18	27		
			88	177
Teesta sub-division—				
Sâl sleepers	230	307		
Sissu poles	7	...		
			237	307
Kurseong sub-division—				
Scantling (various)	64	59		
			64	59
Buxa sub-division—				
Sâl logs	237	8,495		
„ scantling	291	234		
„ sleepers	3,190	4,263		
„ posts	167	...		
„ pieces	44	380		
„ slabs	124	...		
			4,053	13,372

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally, during the year 1888-89—continued.

TIMBER—*concluded.*

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Received by confiscation in depôts—*concld.*				
Chittagong Division—				
Boats	2	68		
Logs	9	354		
Beams	10	27		
Posts	8	18		
Pieces	4	18		
			33	485
Total confiscated in depôts ...			617	4,297
Received by purchase in depôts—				
Sunderbuns Division—				
Sundri logs	4	85		
			4	85
Received by remeasurement—				
Buxa sub-division—				
Sâl scantling	...	4		
			...	4
Singbhoom sub-division—				
Sâl scantling	...	86		
Karam plank	...	2		
			...	88
Sunderbuns Division—				
Sundri plank	...	1		
„ log	...	1		
			...	
Chittagong Division—				
Boats	...	543		
Logs	...	701		
			...	1,244
Orissa Division—				
Miscellaneous posts	...	45		
			...	45
Total received by remeasurement ...			..	1,383
Received by conversion in depôts—				
Buxa sub-division—				
Sâl scantling	509	821		
„ pieces	71	273		
„ slabs	373	...		
			953	1,094
Singbhoom sub-division—				
Sâl scantling	34	68		
„ planks	30	23		
„ poles	10	10		
„ slabs	11	11		
Gamhar planks	8	11		
Pieces of beams	5	17		
			98	140
Sunderbuns Division—				
Sundri planks	124	65		
			124	65
Total conversion in depôts ...	.....	.....	1,175	1,299
Received by transfer from sale depôts—				
Buxa sub-division—				
Sâl logs	14	324		
			14	324
Sunderbuns Division—				
Sundri planks	190	147		
„ logs	122	1,220		
„ posts	34	239		
Teak planks	44	9		
Roof of beams	21	6		
			411	1,621
Orissa Division—				
Sâl logs	2	89		
Miscellaneous posts	8	4		
			10	93
Total transferred from other sale depôts ...	.....	.....	435	2,038
Received by transfer from other heads—				
Sunderbuns Division—				
Sundri planks	8	5		
			8	5
Total Timber ...	.....	.....	28,221	110,025

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at close of the year—*concluded.*				
Singbhoom sub-division—				
Sâl sleepers b. g.	1,967	6,108		
„ scantling	81	101		
„ beams	230	771		
„ planks	347	812		
„ slabs	8	7		
„ poles	981	981		
Gamhar beam	1	4		
Karam „	3	13		
„ scantling	5	3	3,623	8,800
Sunderbuns Division—				
Sundri logs	85	917		
„ planks	104	53		
Pussur logs	3	7		
Roof beams	21	6		
Teakwood planks	42	8		
Boats	3	...	258	991
Chittagong Division—				
Scantling	2	4	2	4
Orissa Division—				
Sâl logs	151	4,112		
Scantling (various)	22	18		
Sâl posts	50	468		
Other „	21	45	244	4,643
Total balance ...	...	...	8,569	28,353
Total Timber ...	.....	.....	28,221	110,025

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally, during the year 1888-89—continued.

ABSTRACT OF THE CIRCLE—TIMBER.

PARTICULARS.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Balance at commencement of the year ...	.....	.....	10,835	30,599
Received from the forests in sale depôts ...	6,193	19,628		
Ditto ditto and sold locally ...	8,793	43,353		
Ditto by collection of drift	148	7,338		
Found in depôts	13	.....		
Received by confiscation in depôts	617	4,297		
Ditto by purchase ditto	4	85		
Ditto by remeasurement ditto	.....	1,383		
			15,768	76,084
Received by conversion in depôts	.....	.....	1,175	1,299
Ditto by transfer from sale depôts ...	.....	.....	435	2,038
Ditto from other heads	.....	.....	8	5
GRAND TOTAL, TIMBER ...	.....	.....	28,221	110,025

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Removed by purchasers from sale depôts	7,674	27,464		
Sold locally	8,793	43,353		
			16,467	70,817
Given up to owners	1	76		
Reduced on remeasurements	.....	43		
Lost and used by Department	2,587	6,017		
Rectification of error	42	480		
			2,630	6,616
Converted in depôts	.....	.....	120	2,201
Transferred to other sale depôts	.....	.....	435	2,038
Balance at close of the year	.....	.....	8,569	28,353
GRAND TOTAL, TIMBER ...	.....	.....	28,221	110,025

FUEL.

PARTICULARS.	Number or quantity.	Total of each head.
	Mds.	Mds.
Balance at commencement of the year—		
Darjeeling sub-division—		
Firewood	2,971	
Charcoal	7,525	
		10,496
Singbhoom sub-division—		
Firewood	563	
Charcoal	12	
		575
Total balance ...	...	11,071
Received in sale depôts—		
Darjeeling sub-division—		
Firewood	79,203	
Charcoal (bags)	11,452	
		90,655
Julpigori sub-division—		
Firewood (drift), 823 pieces	2,600	
		2,600
Singbhoom sub-division—		
Firewood	3,602	
Charcoal	52	
		3,654
Total received in sale depôts ...	...	96,909
Received from the forests and sold locally—		
Darjeeling sub-division—		
Firewood	1,139	
Charcoal (bags)	234	
Ditto (mds.)	2,511	
		3,884
Teesta sub-division—		
Firewood	71	
		71
Kurseong sub-division—		
Firewood	6,285	
		6,285
Total sold locally ...	...	10,240
Received by confiscation—		
Singbhoom sub-division—		
Firewood	63	
Charcoal	3	
		66
Sunderbuns Division—		
Firewood (5 stacks)	187	
		187
Total confiscation in depôts ...	...	253
Received by conversion in depôt—		
Buxa sub-division—		
Charcoal	22	
		22
GRAND TOTAL, FUEL ...	...	118,495

PARTICULARS.	Number or quantity.	Total of each head.
	Mds.	Mds.
Removed by purchasers from depôts—		
Darjeeling sub-division—		
Firewood	74,414	
Charcoal (bags)	10,384	
		84,798
Julpigori sub-division—		
Firewood (652 pieces)	1,830	
		1,830
Buxa sub-division—		
Charcoal	22	
		22
Singbhoom sub-division—		
Firewood	3,639	
Charcoal	33	
		3,672
Sunderbuns Division—		
Firewood	187	
		187
Total removed by purchasers from sale depôts	...	90,509
Received from the forests and sold locally (as per *contra*)	...	10,240
Reduced on remeasurement—		
Julpigori sub-division—		
Firewood	283	
Singbhoom sub-division—		
Firewood	13	
Total reduced ...	...	296
Balance at close of the year—		
Darjeeling sub-division—		
Firewood	7,760	
Charcoal (bags)	8,593	
		16,353
Julpigori sub-division—		
Firewood (171 pieces)	487	
		487
Singbhoom sub-division—		
Firewood	577	
Charcoal	33	
		610
Total balance ...	...	17,450
GRAND TOTAL, FUEL ...	...	118,495

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally, during the year 1888-89—continued.

BAMBOOS.

PARTICULARS.	Number or quantity.	Total of each head.
	No.	No.
Balance at commencement of the year—		
Singbhoom sub-division—		
Bamboos	542	
Orissa Division—		
Bamboos	350	
		892
Received from forest in depôts—		
Palamow sub-division—		
Bamboos	841,075	
Singbhoom sub-division—		
Bamboos	10,140	
Orissa Division—		
Bamboos	48,200	
		899,415
Received by purchase in forest depôt—		
Kurseong sub-division—		
Bamboos	40	
		40
Received from forests and sold locally—		
Kurseong sub-division—		
Bamboos	40	
		40
Received by transfer from sale depôts—		
Palamow sub-division	301,858	
		301,858
TOTAL BAMBOOS ...	...	1,202,245

PARTICULARS.	Number or quantity.	Total of each head.
	No.	No.
Removed by purchasers from depôts—		
Palamow sub-division—		
Bamboos	240,405	
Singbhoom sub-division—		
Bamboos	10,092	
Orissa Division—		
Bamboos	8,000	
		258,497
Sold locally—		
Bamboos	...	
		80
Transferred to other sale depôts—		
Palamow sub-division—		
Bamboos	...	
		301,858
Used by Department—		
Singbhoom sub-division—		
Bamboos	...	
		304
Balance at close of the year—		
Palamow sub-division—		
Bamboos	600,670	
Singbhoom sub-division—		
Bamboos	286	
Orissa Division—		
Bamboos	40,550	
		641,506
TOTAL BAMBOOS ...	...	1,202,245

OTHER MINOR PRODUCE.

PARTICULARS.	Number or quantity.	Total of each head.
	Mds.	Mds.
Balance at commencement of the year—		
Singbhoom sub-division—		
Sabai grass	57	
		57
Received from the forests in sale depôts—		
Darjeeling sub-division—		
Fodder grass	13	
Singbhoom sub-division—		
Sabai grass	8	
Thatch grass	93	
		114
Received from forests and sold locally—		
Teesta sub-division—		
Manjista (bundles)	35	
Kurseong sub-division—		
Buk seed	5	
Champ ,, ...	5	
Kawala ,, ...	3	
Hazaribagh sub-division—		
Silk cocoons (No. 1,400)	1	
Singbhoom sub-division—		
Silk cocoons (No. 985)	1	
Sabai grass	13	
		63
Received by confiscation—		
Singbhoom sub-division—		
Sabai grass	5	
Sunderbuns Division—		
Wax and honey	8	
Chittagong Division—		
Canes	10	
		23
Received by transfer from sale depôts—		
Singbhoom sub-division—		
Sabai grass	11	
		11
Received by remeasurement—		
Singbhoom sub-division—		
Sabai grass	5	
		5
GRAND TOTAL OTHER PRODUCE ...	...	273

PARTICULARS.	Number or quantity.	Total of each head.
	Mds.	Mds.
Removed by purchasers from depôts—		
Singbhoom sub-division—		
Sabai grass	7	
Thatch ,, ...	98	
Chittagong Division—		
Canes	10	
		115
Given to Military Department—		
Darjeeling sub-division—		
Fodder grass	13	
		13
Received from forests and sold locally—		
Teesta sub-division—		
Manjista	35	
Kurseong sub-division—		
Seeds	13	
Singbhoom sub-division—		
Sabai grass	13	
Silk cocoons	1	
Hazaribagh sub-division—		
Silk cocoons	1	
		63
Written off as destroyed—		
Sunderbuns Division—		
Wax and honey	8	
		8
Transferred to other sale depôts—		
Singbhoom sub-division—		
Sabai grass	11	
		11
Balance at close of the year—		
Singbhoom sub-division—		
Sabai grass	63	
		63
GRAND TOTAL OTHER PRODUCE ...	...	273

MISCELLANEOUS ARTICLES.

PARTICULARS.	Number or quantity.	Total of each head.
	No.	No.
Balance at commencement of the year—	...	...
Received by confiscation—		
Sunderbuns Division—		
Boat, tools, &c.	27	
Chittagong Division—		
Country liquor, bottle	1	
		28
Received by drift collection—		
Chittagong Division—		
Elephant tusks	1	
		1
GRAND TOTAL MISCELLANEOUS ARTICLES	...	29

PARTICULARS.	Number or quantity.	Total of each head.
	No.	No.
Removed by purchasers—		
Sunderbuns Division—		
Boat, tools, &c.	27	
Chittagong Division—		
Country liquor, bottle	1	
Elephant tusks	1	
		29
Balance at close of the year	...	...
GRAND TOTAL MISCELLANEOUS ARTICLES	...	29

FORM No. 57A.

FOREST DEPARTMENT, BENGAL.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1888-89.

Description of Timber and other Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
TIMBER.			Rs.			Rs.	Rs.	Rs.	
Darjeeling Sub-division.									
Scantling, various	72	147	111	88	177	110	...	1	
Teesta Sub-division.									
Sleepers, sâl	...	...	...	230	307	230	...	...	
Poles	7	...	...	7	...	...	...	...	
Total ...	7	...	...	237	307	230	230	...	
Kurseong Sub-division.									
Scantling	64	59	30	64	59	20	...	10	
Buxa Sub-division.									
Logs	171	5,927	4,445	237	8,495	5,309	...	...	
Sleepers	4,713	6,385	1,747	3,190	4,263	798	...	...	
Scantling	255	160	120	291	234	146	...	...	
Poles and slabs	417	614	79	335	380	84	...	...	
Total ...	5,556	13,086	6,391	1,053	13,372	6,337	...	54	
Singbhoom Sub-division.									
Sleepers	3,037	9,470	9,111	1,967	6,108	5,901	...	...	
Scantling	121	86	86	667	1,704	1,704	...	...	
Poles	1,167	1,167	583	981	981	245	...	...	
Slabs and pieces	6		2	8	7	4	...	...	
Total ...	4,331	10,728	9,782	3,623	8,800	7,854	...	1,928	
Sunderbuns Division.									
Logs	293	2,390	2,248	88	924	922	...	...	
Scantling	157	182	200	125	59	64	...	...	
Poles and posts	97	507	110	...	...	...	...	...	
Pieces	1	20	10	...	...	...	...	...	
Slabs and ends	45	...	10	...	...	...	...	...	
Teak planks	...	...	...	42	8	16	...	...	
Boats	...	...	...	3	...	95	...	...	
Total ...	593	3,099	2,578	258	991	1,097	...	1,481	
Chittagong Division.									
Logs	30	1,138	435	...	...	...	...	...	
Boats	4	339	20	...	...	...	...	...	
Scantling	44	112	17	2	4	2	...	...	
Slabs and ends	2	3	1	...	...	...	...	..	
Total ...	80	1,592	473	2	4	2	...	471	
Orissa Division.									
Logs	73	1,870	234	151	4,112	960	...	...	
Slabs and miscellaneous pieces	37	...	9	...	...	...	...	...	
Sâl scantling	22	18	8	22	18	7	...	...	
Do. posts	...	...	...	50	468	12	...	...	
Other do.	...	...	...	21	45	1	...	...	
Total ...	132	1,888	251	244	4,643	980	729	...	
Total Timber ...	10,835	30,599	19,616	8,569	28,353	16,630	...	2,986	
FUEL.									
Darjeeling Sub-division.									
Firewood ... ... Mds.	2,971	5,199	975	7,760	13,580	2,545	...	...	
Charcoal ... ... Bags	7,525	52,675	5,644	8,593	60,151	8,593	...	...	
Total ...	10,496	57,874	6,619	16,353	73,731	11,138	4,519	...	
Julpigori Sub-division.									
Firewood ... ... Mds.	...	...	...	487	852	95	95	...	
Singbhoom Sub-division.									
Firewood ... ... Mds.	563	985	69	577	1,010	62	...	...	
Charcoal ... ... ,,	12	84	6	33	231	33	...	...	
Total ...	575	1,069	75	610	1,241	95	20	...	
Total Fuel ... Mds.	11,071	58,943	6,694	17,450	75,824	11,328	4,634	...	
BAMBOOS.									
Palamow Sub-division ...	...	...	...	600,670	...	3,604	3,604	...	
Singbhoom Sub-division. ...	542	...	8	286	...	5	...	3	
Orissa Division	350	...	1	40,550	...	115	114	...	
Total Bamboos ...	892	...	9	641,506	...	3,724	3,715	...	
OTHER MINOR PRODUCE.									
Singbhoom Sub-division Mds.	57	...	7	63	...	8	1	...	
GRAND TOTAL VALUE ...	...	...	26,326	...	...	31,690	5,364	...	

BENGAL SECRETARIAT LIBRARY.

Form No 57B.

FOREST DEPARTMENT, BENGAL.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1888-89.

Description.	On hand at commencement of the year. Number.	On hand at commencement of the year. Value.	On hand at close of the year. Number.	On hand at close of the year. Value.	Difference in value. In favour of the year.	Difference in value. Against the year.	Remarks.
Direction Division.		Rs.		Rs.	Rs.	Rs.	
Stores (mathematical) ...	18	420	18	420	...	...	
Do. (miscellaneous) ...	3	7	4	14	...	..	
Furniture	53	441	44	369	...	...	
Tents	3	380	3	300	...	...	
Total ...	77	1,248	69	1,103	...	145	
Working Plans Division.							
Stores (miscellaneous) ...	72	88	59	80	...	...	
Office boxes	2	15	2	15	...	...	
Furniture	7	105	7	105	...	...	
Total ...	81	208	68	200	...	8	
Darjeeling Division.							
Furniture	8	76	6	70	...	...	
Stores (miscellaneous) ...	...	...	1	6	...	...	
Iron safes	1	3	1	38	...	...	
Tents	2	30	2	30	...	...	
Total ...	11	144	10	144	...	...	
Darjeeling sub-division.							
Bungalows (inspection) ..	4	4,350	7	5,085	...	...	
Range houses	5	1,620	5	1,695	...	...	
Other do.	37	350	38	400	...	...	
Cattle pound	1	166	1	150	...	...	
Fuel godowns	8	3,000	9	3,275	...	...	
Dumpy level	1	110	1	110	...	...	
Other stores (mathematical)	14	250	15	300	...	...	
Iron safes	7	270	7	250	...	...	
Furniture	106	500	106	450	...	...	
Tent	1	20	1	15	...	...	
Total ...	184	10,630	190	11,635	1,005	...	
Teesta sub-division.							
Bungalow (head-quarters)	1	2,700	1	2,500	...	...	
Ditto (inspection) ...	4	1,900	4	1,800	...	...	
Range houses	4	900	4	1,900	...	...	
Other do.	6	300	6	200	...	...	
Stores (mathematical) ...	6	40	11	60	...	...	
Do. (miscellaneous) ...	196	150	196	100	...	...	
Iron safes	5	140	5	120	...	...	
Cash or office boxes ...	4	30	4	20	...	...	
Furniture	21	200	21	150	...	...	
Tent	1	30	1	30	...	...	
Total ...	248	6,390	253	5,980	...	410	
Kurseong sub-division.							
Bungalow (head-quarters)	1	3,700	1	3,700	...	...	
Ditto (inspection) ...	6	6,000	6	5,500	...	...	
Range houses	5	650	5	500	...	...	
Other do. (at head-quarters).	6	7,000	5	5,500	...	...	
Other houses in ranges ...	17	180	25	150	...	...	
Elephant shed	1	160	1	150	...	...	
Cattle pound	1	275	1	225	...	...	
Stores (mathematical) ...	4	150	9	151	...	...	
Do. (miscellaneous) ...	...	...	45	68	...	...	
Iron safes	7	160	7	140	...	...	
Chubb's padlock	1	10	1	8	...	...	
Cash or office boxes ...	2	40	2	30	...	...	
Furniture	93	700	96	708	...	...	
Tents	2	...	...	...	...	...	
Elephant	1	2,125	1	800	...	...	
Total ...	147	21,150	205	17,630	...	3,520	
Julpigori sub-division.							
Bungalow (head-quarters)	1	600	1	600	...	...	
Range houses	4	100	4	300	...	...	
Other buildings at head-quarters.	10	1,000	6	600	...	...	
Other buildings in ranges	13	60	23	640	...	...	
Stores (mathematical) ...	9	40	5	40	...	...	
Do. (miscellaneous) ...	64	150	94	150	...	...	
Iron safes	3	105	3	100	...	...	
Despatch box	1	23	1	20	...	...	
Furniture	35	100	44	150	...	...	
Tent	1	100	1	200	...	...	
Elephant	1	2,125	1	2,125	...	...	
Total ...	142	4,403	183	4,925	522	...	
Buxa sub-division.							
Bungalow (head-quarters)	1	4,500	1	4,500	...	...	
Ditto (inspection) ...	3	1,172	4	1,618	...	...	
Range houses	7	500	4	300	...	...	
Other do.	38	360	47	360	...	..	
Store godown	1	12	1	10	...	...	
Elephant shed	1	40	1	35	...	..	
(mathematical) ...	23	130	19	100	...	...	
(miscellaneous) ...	659	900	690	770	...	...	
... ...	6	180	6	150	...	...	
... ...	2	20	2	15	...	...	
... ...	55	300	57	300	...	...	
	1	70	1	192	...	...	
	8	16,700	10	18,625	...	...	
		[illegible]	843	26,975	2,091	...	

Description.	On hand at commencement of the year. Number.	On hand at commencement of the year. Value.	On hand at close of the year. Number.	On hand at close of the year. Value.	Difference in value. In favour of the year.	Difference in value. Against the year.	Remarks.
Chota Nagpore Division.		Rs.		Rs.	Rs.	Rs.	
Stores (mathematical) ...	65	375	65	375	...	...	
Do. (miscellaneous) ...	20	15	19	15	...	...	
Iron safe	1	160	1	160	...	...	
Furniture	53	352	46	350	...	...	
Tent	2	240	2	240	...	...	
Elephant	1	1,800	1	2,000	...	...	
Total ...	142	2,942	134	3,140	198	...	
Palamow sub-division.							
Bungalows (head-quarters)	1	1,900	1	1,900	...	...	
Ditto (inspection) ...	8	1,872	8	1,872	...	...	
Range houses	4	268	4	268	...	...	
Other do.	17	425	19	475	...	...	
Stores (mathematical) ...	39	292	39	292	...	...	
Do. (miscellaneous) ...	50	153	50	153	...	...	
Iron safe	1	40	1	40	...	...	
Despatch boxes	6	105	6	105	...	...	
Wooden office boxes ...	6	51	6	51	...	...	
Furniture	30	247	30	247	...	...	
Tent	4	330	2	300	...	...	
Elephant	1	1,200	1	1,200	...	...	
Total ...	167	6,883	167	6,903	20	...	
Hazaribagh sub-division.							
Range houses	1	400	2	480	...	...	
Other do.	4	300	5	300	...	...	
Stores (mathematical) ...	43	178	39	178	...	...	
Do. (miscellaneous) ...	76	124	72	124	...	...	
Iron safe	1	40	1	40	...	...	
Despatch box	1	40	1	40	...	...	
Furniture	39	188	35	188	...	...	
Total ...	165	1,270	155	1,350	80	...	
Singbhoom sub-division.							
Bungalow (head-quarters)	1	3,500	1	3,500	...	...	
Range houses	11	2,117	11	2,117	...	...	
Other do. in ranges ...	32	627	32	627	...	...	
Elephant shed	1	120	1	120	...	...	
Stores (mathematical) ...	44	410	44	410	...	...	
Do. (miscellaneous) ...	1,478	4,792	1,478	4,792	...	...	
Iron safes	5	200	5	200	...	...	
Furniture	81	517	81	517	...	...	
Tents	3	145	3	145	...	...	
Elephant	1	2,000	1	1,800	...	...	
Buffaloes	...	...	4	80	...	...	
Total ...	1,657	14,428	1,661	14,308	...	120	
Sunderbuns Division.							
Revenue station-houses ...	41	7,602	40	7,685	...	...	
Stores (mathematical) ...	102	489	104	538	...	...	
Do. (ordnance) ...	50	108	48	97	...	...	Excluding value of ammunition which is not known.
Do. (ship's)	2,692	1,550	3,511	2,020	...	...	
Do. (other)	1,033	1,861	1,081	1,954	...	...	
Iron safes	26	532	27	566	...	...	
Chubb's padlocks... ...	25	173	25	165	...	...	
Furniture	254	956	260	984	...	...	
Steamer *Cygnet*	1	22,531	1	23,632	...	...	
Barge	1	5,941	1	5,436	...	...	
Jolly-boats	3	1,018	3	916	...	...	
Steamer *Seal*	1	31,360	1	31,178	...	...	
Station boats	48	5,605	44	11,319	...	...	
Total ...	4,277	79,726	5,146	86,490	6,764	...	
Chittagong Division.							
Bungalows (head-quarters)	1	2,000	1	2,100	...	...	
Ditto (inspection) ...	1	150	1	150	...	...	
Range houses	5	470	5	470	...	...	
Other buildings at head-quarters.	10	1,200	9	1,300	...	...	
Other buildings in ranges	98	1,937	103	1,977	...	...	
Stores (mathematical) ...	14	335	14	335	...	...	
Do. (miscellaneous) ...	603	1,288	621	1,488	...	...	
Iron safes	9	268	16	454	...	...	
Furniture	71	720	99	829	...	...	
Boats	10	173	9	146	...	...	
Total ...	822	8,541	878	9,249	708	...	
Orissa Division.							
Bungalow (sub-divisional head-quarters).	1	300	2	3,342	...	...	
Range houses	8	1,600	8	1,600	...	...	
Other buildings	37	1,065	44	1,144	...	...	
Stores (mathematical) ...	58	288	59	304	...	...	
Do. (miscellaneous) ...	400	1,384	454	1,363	...	...	
Building materials ...	648	21	556	18	...	...	
Iron safes	9	360	9	360	...	...	
Furniture	54	413	61	478	...	...	
Tent	1	140	1	140	...	...	
Elephants	2	3,300	2	3,300	...	...	
Buffaloes	18	310	10	167	...	...	
Total ...	1,236	9,181	1,206	12,214	3,033	...	
Grand Total ...	10,162	1,92,028	11,168	2,02,246	10,218	...	
Abstract.							
Total Value.							
Timber and other produce ...	...	26,326	...	31,690	5,364	...	
Live-stock, stores, tools and plant. ...	...	1,92,028	...	2,02,246	10,218	...	
Grand Total ...	...	2,18,354	...	2,33,936	15,582	...	

A. L. Home,

Conservator of Forests, Bengal.

FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Revenue of the different Divisions during 1888-89.

BUDGET HEADS.	Direction Division.	Working Plans Division.	Darjeeling Division.	Darjeeling sub-division.	Teesta sub-division.	Kurseong sub-division.	Julpigori Division.	Julpigori sub-division.	Buxa sub-division.	Chota Nagpore Division.	Palamow sub-division.	Hazaribagh sub-division.	Singbhoom sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	TOTAL.
RECEIPTS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the forests by Government agency—																	
a. Timber ...	...	...	...	...	46 2 8	252 6 0	...	2,315 0 0	7,265 13 0	...	...	...	5,763 0 4	...	340 0 0	551 9 3	16,533 15 3
b. Firewood and charcoal ...	...	...	...	35,297 10 6	9 15 0	498 12 9	...	...	21 8 0	...	...	...	562 11 0	...	...	5 0 0	36,395 9 3
c. Bamboos ...	...	...	...	...	...	30 10 0	...	...	...	...	3,008 10 6	...	121 5 8	...	...	50 0 0	3,210 10 2
d. Sandal-wood ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	236 3 0	40 1 0	...	27 9 0	...	...	...	...	25 0 0	34 8 0	269 10 4	...	...	...	632 15 4
II.—Timber and other produce removed from the forests by consumers or purchasers	...	...	...	...	...	...	...	...	...	...	...	...	95 9 5	...	...	3,798 0 0	3,893 9 5
a. Timber	...	...	...	15,729 4 9	8,193 5 4	9,791 15 3	...	8,329 7 0	4,504 14 0	...	...	9 11 6	1,508 4 0	2,36,507 9 6	24,937 8 9	308 12 6	3,09,820 12 7
b. Firewood and charcoal ...	...	...	...	10,093 6 9	4,560 11 2	6,714 14 1	...	1,800 14 0	173 4 0	...	4 0 0	62 15 3	1,343 8 2	1,29,863 15 10	282 12 3	2,925 10 9	1,57,826 0 3
c. Bamboos ...	...	...	...	269 4 0	852 12 10	1,891 12 0	...	4 0 0	17 8 0	...	41 13 6	381 15 6	146 2 5	...	32,331 1 7	2,033 0 3	37,969 6 1
d. Grazing and fodder grass ...	...	...	6 8 0	4,185 0 0	1,994 14 9	1,141 1 3	...	53 0 0	354 9 6	...	560 7 0	64 4 3	336 5 6	...	...	615 5 3	9,311 7 6
e. Other minor produce	...	...	784 12 9	322 2 6	399 12 9	385 6 6	...	260 0 0	213 1 3	...	178 14 0	1,272 2 11	388 3 3	61,166 7 1	9,745 15 3	2,768 14 8	77,885 12 11
III.—Drift and waif wood, and confiscated forest produce	3,150 14 7	...	...	...	390 0 0	79 13 3	...	1,499 12 0	19 0 0	...	...	...	17 3 2	964 6 0	1,002 15 9	136 4 3	7,260 5 0
IV.—Revenue from forests not managed by Government—																	
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Miscellaneous—																	
a. Fines and forfeitures	...	...	...	...	23 12 0	...	...	...	...	...	...	...	...	...	...	...	23 12 0
b. Refunds	1 14 10	...	...	14 9 4	5 2 6	48 8 8	...	22 0 1	12 3 0	51 3 0	194 0 2	...	14 0 4	18 7 6	2,233 2 11	4 2 8	2,619 7 0
c. Other sources ...	1 8 0	...	...	169 7 6	331 2 8	455 10 8	...	44 0 0	338 6 0	167 15 0	42 8 0	...	145 15 0	7,755 1 8	4,031 9 0	39 10 3	13,522 13 9
TOTAL RECEIPTS ...	3,154 5 5	...	1,027 7 9	66,120 14 4	16,807 11 8	21,318 7 5	...	14,328 1 1	12,920 2 9	219 2 0	4,055 5 2	1,825 9 5	10,711 14 7	4,36,275 15 7	74,905 1 6	13,286 5 10	6,76,906 8 6

Note.—Correctness of figures not confirmed up to 12th August 1889.

CALCUTTA,
The 10th July 1889.

JAMES TAYLOR,
Assistant Comptroller-General (Forests).

FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1888-89.

BUDGET HEADS. A.—CONSERVANCY AND WORKS.	Direction Division.	Working Plans Division.	Darjeeling Division.	Darjeeling Sub-division.	Teesta Sub-division.	Kurseong Sub-division.	Julpigori Division.	Julpigori Sub-division.	Buxa Sub-division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	Total.
	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the forests by Government Agency—																	
a. Timber	...	...	...	...	74 12 6	191 4 0	...	752 9 0	2,787 7 0	...	...	...	2,319 5 1	...	...	921 4 7	7,046 10 2
b. Firewood and charcoal	...	...	...	26,401 7 1	...	440 0 0	...	...	8 1 0	...	...	...	534 13 6	...	...	...	27,384 5 7
c. Bamboos	...	...	...	...	...	18 6 0	...	...	...	...	5,748 1 5	...	53 0 0	...	...	159 12 0	5,979 3 5
d. Sandal-wood ...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	222 15 9	...	20 13 0	...	...	...	...	5 0 0	17 14 10	23 12 3	...	...	...	290 7 10
II.—Timber and other produce removed from the forests by consumers or purchasers	...	...	...	1,768 15 6	...	288 14 6	...	...	...	...	...	...	43 4 0	34,888 3 9	528 9 10	...	37,517 15 7
III.—Drift and waif wood and confiscated forest produce	2,461 3 0	...	...	...	...	...	..	421 4 0	...	...	...	...	2 14 6	46 12 0	522 10 9	...	3,454 12 3
IV.—Revenue from forests not managed by Government—																	
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in forests managed by Government	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VI.—Live-stock, stores, tools and plant—																	
a. Purchase of cattle ..	...	...	...	...	...	...	...	...	...	...	...	...	80 0 0	...	...	...	80 0 0
b. Feed and keep of cattle	..	...	...	...	...	403 5 3	...	594 7 5	3,582 13 8	346 15 7	518 10 3	...	637 13 8	...	...	1,048 2 6	7,132 4 4
c. Purchase of stores, tools and plant ...	25 0 0	...	...	200 8 0	19 11 0	144 1 0	...	204 12 0	207 6 0	...	14 5 9	...	22 11 3	5,754 3 0	568 12 0	92 2 0	7,253 8 0
VII.—Communications and buildings—																	
a. Roads and bridges...	...	...	...	3,990 12 9	1,354 9 4	841 13 0	...	642 6 0	374 6 10	...	512 14 6	280 0 0	2,914 10 3	...	228 1 0	239 8 6	11,379 2 2
b. Buildings	...	...	...	1,933 4 6	1,339 2 9	2,099 11 0	...	901 10 8	1,280 15 10	...	474 1 3	95 12 5	677 15 0	1,305 7 9	1,704 11 6	635 1 2	12,447 13 10
c. Other works	...	...	...	...	...	97 12 0	...	...	...	...	1 5 0	...	3 12 0	145 10 0	...	...	248 7 0
VIII.—Demarcation, improvement and extension of forests—																	
a. Demarcation ...	...	...	...	523 5 0	375 2 0	92 1 0	...	986 15 10	1,120 6 8	...	107 11 6	92 14 6	2,257 3 7	5 0 0	786 6 0	743 14 6	7,091 0 7
b. Compensation for land and rights ...	...	...	...	...	...	...	...	...	...	...	...	...	95 1 0	...	...	...	95 1 0
c. Surveys and working plans	...	164 14 5	...	...	16 0 0	12 4 0	...	...	...	...	3 1 0	...	804 0 0	...	...	64 1 10	1,064 5 3
d. Sowing and planting	..	...	...	2,061 0 2	...	358 14 10	...	...	49 4 6	...	18 1 0	(*a*) 1 0 0	32 8 3	...	3,167 4 1	1,148 8 0	6,836 8 10
e. Protection from fire	...	...	...	67 10 3	1,932 3 9	3,116 13 0	...	1,619 7 1	2,186 13 8	...	891 2 4	347 0 0	2,807 8 7	...	...	5,489 9 9	18,456 4 5
f. Other works	...	...	...	...	138 12 0	157 7 0	...	171 5 6	75 0 0	...	206 0 0	...	119 8 0	...	...	187 1 6	1,055 2 0
IX.—Miscellaneous—																	
a. Refunds	...	...	...	...	...	...	...	...	...	...	...	...	...	66 6 6	...	...	66 6 6
b. Law charges... ...	..	...	...	...	...	...	...	...	...	...	...	..	1 7 6	...	21 4 0	...	22 11 6
c. Other charges ...	75 15 10	...	...	440 1 3	41 7 9	109 3 0	17 0 0	60 4 0	569 15 6	1 0 0	11 5 0	1 8 0	48 11 0	(*b*)1,616 1 0	181 2 0	177 5 6	3,350 15 10
Total A.—Conservancy and works	2,562 2 10	164 14 5	Nil	37,610 0 3	5,291 13 1	8,392 10 7	17 0 0	6,355 1 6	12,242 10 8	347 15 7	8,511 11 0	836 1 9	13,479 15 5	43,827 12 0	7,708 13 2	10,906 7 10	1,58,255 2

(*a*) Corrected with reference to Conservator's No. 181 AR—A, dated 20th June 1889.
(*b*) Rupees 425 on account of rewards for killing tigers in the Sunderbuns Division, charged under AIXC during 1888-89, now transferred to the Civil Department, *vide* L. S. No. 767, dated 18th June 1889.

NOTE.—Correctness of figures not confirmed up to 12th August 1889.

CALCUTTA,
The 10*th July* 1889.

JAMES TAYLOR,
Assistant Comptroller-General (Forests).

FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1888-89—concluded.

BUDGET HEADS.	Direction Division.	Working Plans Division.	Darjeeling Division.	Darjeeling Sub-division.	Teesta Sub-division.	Kurseong Sub-division.	Julpigori Division.	Julpigori Sub-division.	Buxa Sub-division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	TOTAL.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Brought forward, Total A, Conservancy and Works.	2,562 2 10	164 14 5	.....	37,610 0 3	5,291 13 1	8,392 10 7	17 0 0	6,355 1 6	12,242 10 8	347 15 7	8,511 11 0	836 1 9	13,479 15 5	43,827 12 0	7,708 13 2	10,906 7 10	1,58,255 2 1
B — ESTABLISHMENT.																	
I.—Salaries—																	
a. Conservators	15,000 0 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15,000 0 0
b. Superior officers ...	3,250 0 0	3,410 5 1	7,800 0 0	1,379 0 6	900 0 0	3,676 10 8	6,200 0 0	450 0 0	...	11,274 4 2	2,875 11 2	...	2,550 0 0	14,535 7 8	6,483 13 11	9,909 10 10	74,695 0 0
c. Subordinate Forest and Depôt establishments	720 0 0	...	...	5,894 14 11	4,338 7 3	5,698 12 11	...	3,780 14 3	4,304 9 1	...	3,496 4 0	980 15 4	3,752 8 10	14,417 6 8	10,192 4 10	5,315 3 4	62,392 5 5
d. Office establishments	3,953 7 5	720 14 7	374 9 11	1,085 4 7	738 10 9	1,055 1 10	...	647 12 0	1,067 3 5	1,162 1 2	577 14 11	...	630 2 6	3,163 5 6	1,532 9 9	1,386 7 7	18,095 9 11
e. Deputation and special allowances ...	651 11 1	144 1 1	74 13 5	206 8 1	...	6 3 1	...	91 10 4	...	...	...	...	...	217 11 3	1,200 0 0	...	2,592 10 4
II.—Travelling allowances—																	
a. Conservators	2,687 8 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,687 8 9
b. Superior officers ...	843 14 4	489 9 0	2,650 5 0	1,158 10 0	444 0 0	1,809 14 0	39 0 0	109 4 6	1,453 7 2	1,521 12 0	638 5 6	...	618 5 4	1,190 14 6	2,303 12 0	1,017 8 0	16,288 9 4
c. Subordinate Forest and Depôt establishments	290 5 0	...	...	1,482 15 3	861 14 1	1,604 1 1	...	394 6 6	565 6 6	...	563 14 4	89 0 0	564 7 2	150 5 6	1,064 13 0	920 11 0	8,552 3 5
d. Office establishments	591 15 1	3 2 8	5 5 4	119 7 3	50 4 3	142 14 4	...	15 1 4	95 13 4	77 2 8	20 5 4	...	24 4 0	167 8 2	111 3 6	33 12 8	1,458 3 11
III.—Contingencies—																	
a. Stationery	...	...	...	...	...	...	...	...	...	...	3 9 0	...	...	...	2 1 0	2 1 0	7 11 0
b. Carriage of tents and records	168 1 0	...	41 13 2	59 11 9	32 2 0	0 8 0	...	9 2 0	17 8 0	66 11 9	21 1 4	...	16 3 0	56 6 3	2 8 0	23 1 0	514 13 3
c. Rents, rates and taxes	...	...	...	473 11 0	...	147 6 5	...	217 15 3	0 12 0	381 0 0	9 0 0	6 0 0	59 0 0	1,240 1 6	5 12 0	418 2 6	2,958 12 8
d. Pay of Police guards...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
e. Official postage ...	255 13 0	11 4 0	48 14 6	59 12 0	56 1 6	164 4 0	...	67 13 0	151 1 0	68 15 0	23 3 6	11 0 6	66 0 0	441 15 0	245 1 0	198 3 0	1,869 5 0
f. Sundries	526 15 4	214 4 6	165 10 6	255 14 0	104 6 6	64 9 0	5 9 0	123 0 6	105 6 0	76 7 6	102 10 7	4 6 6	96 1 9	705 2 2	127 10 0	122 11 3	2,800 13 1
Total B, Establishments ...	28,939 11 0	4,993 8 11	11,161 7 10	11,675 13 4	7,525 14 4	14,370 5 4	6,244 9 0	5,906 15 8	7,761 2 6	14,628 6 3	8,331 15 8	1,091 6 4	8,377 0 7	36,286 4 2	23,271 9 0	19,347 8 2	2,09,913 10 1
GRAND TOTAL OF EXPENDITURE	31,501 13 10	5,158 7 4	11,161 7 10	49,285 13 7	12,817 11 5	22,762 15 11	6,261 9 0	12,262 1 2	20,003 13 2	14,976 5 10	16,843 10 8	1,927 8 1	21,857 0 0	80,114 0 2	30,980 6 2	30,254 0 0	3,68,168 12 2

NOTE.—Correctness of figures not confirmed up to 12th August 1889.

CALCUTTA,
The 10*th July* 1889.

JAMES TAYLOR,
Assistant Comptroller-General (Forest).

Form No. 59.

FOREST DEPARTMENT, BENGAL.

Account Current for the year 1888-89.

	Rs. A. P.	Rs. A. P.
To cash balance	...	286 0 0
,, VIII.—Assessed Taxes—		
Income Tax—Deductions from salaries	...	2,644 9 1
,, Revenue as per Annual Summary, Form No. 58	...	6,76,906 8 6
,, Service Funds—		
Civil Fund—Ordinary, Bengal ...	...	
,, Additional, Bengal ...	...	
Military Fund—Bengal	...	
,, ,, Madras	...	
,, Orphan Fund—Bengal ...	...	
Uncovenanted Service Family Pension Fund—Bengal	4,818 4 0	
General Family Pension Fund ...	345 0 0	
Hindu Family Annuity Fund ...	...	5,163 4 0
,, Deposits	...	537 0 0
,, Forest cash remittances—local—		
Forest cheques drawn	3,49,135 0 8	
Inter-Divisional Transfers	2,620 13 2	3,51,755 13 10
,, Advances recoverable	...	2,49,430 2 0
,, Suspense	...	163 6 9
,, Account Current (other Governments)—		
Remittances from Government of India	6,347 6 5	
Remittances from Government of North-Western Provinces and Oudh	3,290 13 0	
Remittance from Government of Assam	20 0 0	9,658 3 5
,, Inter-Departmental Transfers—		
Public Works Department other branches	119 2 6	
Marine Department	6,717 8 5	
Military Department, Bengal ...	208 14 0	
Civil Department—		
Rs. A. P.		
Jail 238 8 0		
Mathematical Instrument Department 339 14 0		
Miscellaneous 844 9 0		
Survey of India Department 158 10 0		
Rewards for killing tigers 125 0 0	1,706 9 0	8,752 1 11
Total ...	...	13,05,297 1 6

	Rs. A. P.	Rs. A. P.
By Expenditure as per Annual Summary, Form No. 58	...	3,68,168 12 2
,, Deposits	...	38 0 3
,, Forests Cash remittances -local—		
Remittances to Treasuries ...	6,55,484 14 3	
Inter-Divisional Transfers ...	2,626 15 2	6,58,111 13 5
,, Advances recoverable	...	2,49,774 4 3
,, Suspense	...	124 8 6
,, Account Current (other Government)—		
Remittances to the Government of the North-Western Provinces and Oudh	3,285 10 7	3,285 10 7
,, Inter-Departmental Transfers—		
Rs. A. P.		
Public Works Department, other branches 6,871 1 10		
Public Works Department Northern Bengal State Railway 226 6 9		
Public Works Department Eastern Bengal State Railway 17 8 0	7,115 0 7	
Military Department Bengal ...	16,515 5 9	
Civil Department		
Jail 450 0 0		
Mathematical Instrument Department 28 8 0		
Rewards for killing tigers 550 0 0	1,028 8 0	
Telegraph Department	203 4 0	
Marine Department	61 8 0	24,923 10 4
,, Cash balance	...	870 6 0
Total ...	...	13,05,297 1

NOTE.—Correctness of figures not confirmed up to 12th August 1889.

CALCUTTA,
The 188 .

JAMES TAYLOR,
Assistant Comptroller-General, Forests.

Form No. 60.

FOREST DEPARTMENT, BENGAL.

Revenue received and outstandings on account of revenue during 1888-89.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	Bengal share, Gunduck drift operations and refunds, &c.	...	3,154 5 5	3,154 5 5	3,154 5 5	...	
Working Plans	.....	...	...	...	...	...	
Darjeeling	Other minor produce, &c. ...	...	1,027 7 9	1,027 7 9	1,027 7 9	...	
Darjeeling subdivision ...	Timber and other produce, &c.	...	66,120 14 4	66,120 14 4	66,120 14 4	...	
Teesta ditto ...	Ditto ditto	...	16,807 11 8	16,807 11 8	16,807 11 8	...	
Kurseong ditto ...	Ditto ditto	121 0 0	21,663 15 5	21,784 15 5	(a)21,318 7 5	(b)345 8 0	(a) Rs. 121 deducted and written off. (b) due for produce tendered for; delivery not taken during year.
Julpigori	.....	...	...	...	...	...	
Julpigori subdivision ...	Timber and other produce, &c.	...	14,328 1 1	14,328 1 1	14,328 1 1	...	
Buxa ditto ...	Ditto ditto	...	12,920 2 9	12,920 2 9	12,920 2 9	...	
Chota Nagpore	Refunds	...	219 2 0	219 2 0	219 2 0	...	
Palamow subdivision ...	Timber and other produce, &c.	...	4,055 5 2	4,055 5 2	4,055 5 2	...	Including Rs. 112 received in advance.
Hazaribagh ditto ...	Ditto ditto	...	1,825 9 5	1,825 9 5	1,825 9 5	...	
Singbhoom ditto ...	Ditto ditto	126 1 9	10,585 12 10	10,711 14 7	10,711 14 7	...	
Sunderbuns	Ditto ditto	...	4,36,275 15 7	4,36,275 15 7	4,36,275 15 7	...	
Chittagong	Ditto ditto	...	82,172 13 5	82,172 13 5	(c)74,905 1 6	...	(c) Rs. 7,267-11-11 deducted, being payment made as Maharajah of Hill Tipperah's share of Fenny revenue collections during 1887-88.
Orissa	Ditto ditto	...	13,236 5 10	13,236 5 10	13,236 5 10	...	
	Total ...	247 1 9	6,84,393 10 8	6,84,640 12 5	6,76,906 8 6	345 8 0	

DARJEELING
[illegible]th *July* 1889.

A. L. HOME,
Conservator of Forests, Bengal.

Form No. 61.

FOREST DEPARTMENT, BENGAL.

Outstandings and Liabilities on account of Contractors and Disbursers for 1888-89.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	...	2,007 12 11	2,007 12 11	367 5 0	1,782 5 10	2,149 10 10	141 13 11	...
Working Plans	...	456 0 10	456 0 10	5 11 6	461 0 6	466 12 0	10 11 2	...
Darjeeling	...	301 3 8	301 3 8	24 10 1	292 6 2	317 0 3	15 12 7	...
Dajeeling subdivision ...	...	26,240 3 0	26,240 3 0	382 10 7	26,498 7 10	26,881 2 5	640 15 5	...
Teesta subdivision ...	...	11,875 14 2	11,875 14 2	377 9 6	11,767 9 9	12,145 3 3	269 5 1	...
Kurseong subdivision ...	...	19,947 5 7	19,947 5 7	509 13 9	20,384 9 2	20,894 6 11	947 1 4	...
Julpigori	...	57 1 9	57 1 9	...	57 1 9	57 1 9	...	...
Julpigori subdivision ...	...	11,342 7 4	11,342 7 4	657 2 11	11,075 7 9	11,732 10 8	390 3 4	...
Buxa subdivision	...	21,160 6 10	21,160 6 10	786 12 0	20,817 15 4	21,604 11 4	444 4 6	...
Chota Nagpore	...	392 11 2	392 11 2	47 10 4	350 13 4	398 7 8	5 12 6	...
Palamow subdivision ...	...	13,070 0 5	13,070 0 5	113 13 3	13,085 9 11	13,199 7 2	129 8 0	0 1 3
Hazaribagh subdivision ...	...	2,012 13 11	2,012 13 11	19 2 4	2,011 10 6	2,030 12 10	17 14 11	...
Singbhoom subdivision ...	...	15,856 7 11	15,856 7 11	1,877 6 9	16,922 4 6	18,799 11 3	2,943 3 4	...
Sunderbuns	...	75,784 2 6	75,784 2 6	2,031 13 1	75,625 11 7	77,657 8 8	1,873 6 2	...
Chittagong	...	22,208 3 7	22,208 3 7	640 10 11	22,780 9 1	23,421 4 0	1,213 0 5	...
Orissa	...	26,717 2 5	26,717 2 5	1,950 3 4	25,860 9 3	27,810 12 7	1,093 10 2	..
Total ...	...	2,49,430 2 0	2,49,430 2 0	9,792 7 4	2,49,774 4 3	2,59,566 11 7	10,136 10 10	0 1 3

Calcutta,
The 1st June 1889.

James Taylor,
Assistant Comptroller-General, Forests.

Form No. 62.

FOREST DEPARTMENT, BENGAL.

Financial results of the year 1888-89.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction	3,151	2,461	3	...	...	3,154	2,461	Gunduck drift operations.
Working Plans	...	...	...	...	6,918	...	6,918	
Darjeeling	36,909	33,243	68,366	26,163	42,783	1,05,275	1,02,189	Comprising the Darjeeling, Teesta, and Kurseong subdivisions.
Julpigori	10,602	7,628	16,646	13,275	22,905	27,248	43,808	Comprising the Julpigori and Buxa subdivisions.
Chota Nagpore	9,785	9,919	7,027	3,706	48,139	16,812	61,764	Comprising the Palamow, Hazaribagh, and Singbhoom subdivisions.
Sunderbuns	965	47	4,35,311	76,824	7,644	4,36,276	84,515	
Chittagong	1,343	887	73,562	15,059	17,674	74,905	33,620	
Orissa	743	1,977	12,494	10,038	20,379	13,237	32,394	Comprising the Angul and Khorda subdivisions.
Total ...	63,498	56,162	6,13,409	1,45,065	1,66,942	6,76,907	3,68,169	

Darjeeling,
The 26th July 1889.

A. L. Home,
Conservator of Forests, Bengal.

APPENDIX A.

FOREST DEPARTMENT, BENGAL.

Statement showing the approximate length of boundaries, and number of boundary pillars or posts, in the Reserved Forests at the close of 1888-89.

Division or sub-division.	Boundaries cleared and demarcated.				Natural uncleared boundaries, along which posts or pillars are erected.		Natural uncleared boundaries, along which posts or pillars are not necessary.	Total for each forest division or sub-division.		Remarks.
	Chargeable to A VII*a*.	Chargeable to A VIII*a*.	Chargeable to A VIII*e*.	Number of posts or pillars.	Total length.	Number of posts or pillars.	Total length.	Length of all boundaries.	Number posts or pillars.	
	Miles.	Miles.	Miles.		Miles.		Miles.	Miles.		
Darjeeling sub-division ...	...	79·9	...	1,138	43·9	232	51·0	174 8	1,370	
Teesta ditto	...	...	195·7	3,144	15·0	110	97 8	308·5	3,254	
Kurseong ditto	5·2	...	111·6	1,503	2 5	16	85·5	204·8	1,519	
Julpigori ditto	...	98·7	...	1,153	6·5	17	109·9	215·1	1,170	
Buxa ditto	...	97·9	...	1,281	...	...	157·4	255·3	1,281	Corrected figures.
Palamow ditto	...	14·0	134·3	1,640	33·3	204	57·7	239·3	1,844	Previous years, figures. Statement received with report differs, but is unreliable.
Hazaribagh ditto	...	9·5	34·4	489	5·3	67	...	49·2	556	
Singbhoom sub-division :—										
Reserved forests	...	394·9	37·3	4,035	41·2	233	99·0	572·4	4,263	Ditto, with addition of 28 masonry pillars. Statement with report unreliable.
Proposed reserves	...	271·8	...	6,220	...	...	17·3	289·1	6,220	
Sunderbuns division	...	1·2	...	*	...	...	231·8	233·0	*	
Chittagong Do.	...	66·1	...	3,387	...	...	431·5	497·6	3,387	Includes 260 standing trees on which boards are fixed.
Angul sub-division	...	1·2	217·9	4,018	...	...	7·8	226·9	4,018	
Khorda sub-division reserved forests	...	1·0	243·1	3,458	·4	8	3·2	247·7	3,466	
Khorda Proposed reserves ...	...	13·0	...	*	*	*	*	13·0	*	
Total ...	5·2	1,049·2	974·3	31,466	148·1	887	1,349·9	3,526 7	32,353	

* Not recorded by Divisional Officer.

APPENDIX B.

Statement showing the cubic contents of trees sold to permit-holders which were actually measured during 1888-89.

Division or sub-division.	Trees.		Volume in cubic feet wood.			
	Description.	Number.	Timber.	Fuel.	Total.	Average per tree.
Darjeeling sub-division	No information	...	...	...	...	...
Teesta sub-division						
Kurseong sub-division						
Julpigori sub-division ...	Sál	35	3,078	...	3,078	88
	Do. (dry)	354	4,118	...	4,118	12
	Sissu (dry)	8	200	...	200	25
	Total ...	397	7,396	...	7,396	19
Buxa sub-division	No information	...	...	...	...	...
Sunderbuns Division ...	Sundri	91	2,366	...	2,366	26

APPENDIX C.

FORM No. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Darjeeling Supply Working Circle, Darjeeling Sub-division, 1888-89.

Block.	Compartment. Number.	Compartment. Area in acres.	Class of forest.	Provisions of Working Plan. Year of working.	Timber and fuel. Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Result of operations. Timber and fuel. Area taken in hand.	Number of trees felled or girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Remarks.
					A.									Rs.	Rs.	A.								Rs.	Rs. A. P.	
Balasan (part) ...	...	130	High timber mixed oak, &c.	1888-89	130	Regeneration fellings.	...	...	...	...	...	325,000	...	...	...	130	4	1,975	...	...	108,865	110,840	Fodder		3 8 0	
Ditto ...	...	370	Ditto ...	"	...	Selection fellings and removal of dry wood.	...	...	...	...	...	...	...	...	...	...							Cows		189 0 0	
Chongtong (part)	...	400	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	175	2,117	...	170	46,134	48,421	Fodder		34 8 0	
																							Cows		152 8 0	
Rishihat	...	835	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	1*	843	...	...	24,632	25,475	Bamboos		3 0 0	
																							Fodder		2 0 0	*Converted into 38 cubic feet of scanting.
																							Cows		7 8 0	
Nai	...	839	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	3†	8,202	...	...	61,650	69,852	Bamboos		1 0 0	
																							Cows		200 0 0	
																							Fodder		5 0 0	
																							Compensation for cows. ...		5 0 0	†These three trees (form No. 4) were converted into 209 cubic feet of scantling.
																							Cane		7 14 0	
Goom	...	600	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	41	1,125	...	...	7,678	8,803	Fodder		50 0 0	
																							Seedlings		54 0 0	
																							Seeds		6 0 0	
																							Honey hive		1 0 0	
Pachim	...	468	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	1,331	...	70	4,592	5,993	Fodder		3 8 0	
Sonadah	...	665	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	506	...	...	20,348	20,854	Do.		0 8 0	
																							Bullocks		151 0 0	
																							Compensation for ponies. ...		4 0 0	
																							Do. do.		13 0 0	
Rungbul	...	650	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	1	460	...	10	48,442	48,912	Fodder		133 2 0	
																							Seedlings		6 0 0	
																							Fodder		9 0 0	
Dooteria	...	534	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	291	291	Compensation for bullocks, &c. ...		34 0 0	
																							Seedlings		2 5 6	
Tongsong	...	653	Ditto ...	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	1	494	...	...	8,053	8,547	Fodder		174 0 0	
																							Bamboos		1 0 0	
Poobong	...	614	Ditto ..	"	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	485	...	...	3,034	3,519	Fodder		223 0 0	
																							Compensation for do. ...		6 0 0	C.ft.
																							Do. for grazing ...		46 0 0	Trees, 222 at 250 = 55,500 Do., 4 = 247 Add 351,507
Total ...	...	...	.....	...	...	.....	...	...	...	...	...	325,000	...	...	...	...	226	17,538	...	250	333,719	351,507	.....	...	1,528 5 6	Total ... 407,254 Instead of ... 325,000

APPENDIX C—*continued.*

FORM No. 2.

FOREST DEPARTMENT, BENGAL.

Register of Yield of the Jellapahar Supply Working Circle, Darjeeling Sub-Division, 1888-89.

Block.	Compartment.		Class of forest.	Provisions of Working Plan.												Result of operations.										Remarks.
					Timber and fuel.								Other forest produce.			Timber and Fuel.							Other Forest Produce.			
								Yield in cubic feet, solid.						Revenue.				Yield in cubic feet, solid.						Revenue.		
	Number.	Area in acres.		Year of working.	Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	Area taken in hand.	Number of trees felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	
					A.									Rs.	Rs.	A.								Rs.	Rs. A. P.	
Rangirum (part)	...	70	High timber mixed oak.	1888-89	...	Regeneration fellings.	...	...	...	...	...	175,000	...	...	...	70	*50	...	...	53	262	315	Fodder ... / Compensation for grazing ponies.	...	8 0 0 / 10 0 0	*Out of 50, 2 trees (Form No. 4) were converted into 99 cubic feet of scantling.
																							Fruits ...	...	0 10 0	
																							Seedlings ...	...	0 8 0	
Do. (balance) ...	...	430	Ditto ...	,,	...	Selection fellings and removal of dry wood.	...	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	Fodder ...	...	10 0 0	
Dawaipani ...	...	857	Ditto ..	,,	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	15	...	...	160	837	997	Cows and bullocks.	...	297 8 0	
																							Fodder ..	...	12 8 0	
																							Compensation for ditto.	...	1 0 0	
																							Cane ...	...	66 0 0	
																							Bamboos ...	...	0 4 0	
Rungjo ...	...	1,100	Ditto ...	,,	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	672	672	Fodder ...	...	14 8 0	
																							Cows ...	...	97 0 0	
																							Cane ...	...	12 0 0	
Rungbi ...	...	1,037	Ditto ...	,,	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...	80	260	340	Cows ...	...	100 0 0	
																							Fodder ...	...	3 8 0	
Tiger Hill ...	...	755	Ditto ...	,,	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...				Fodder ...	...	11 0 0	
																							Cows ...	...	234 8 0	
																							Compensation for bullocks.	...	3 0 0	
																							Sticks ...	...	5 12 0	
Senchal ...	...	517	Ditto ...	,,	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	14	49	...	62	53,661	53,772	Moss ...	...	8 14 0	
																							Cowdung ...	...	0 5 0	
																							Orchids ...	...	0 8 0	
																							Cows ...	...	28 0 0	C. ft.
																							Fodder ...	...	38 0 0	
																							Compensation for ditto.	...	1 0 0	Trees 85, at 250 = 21,250
																										*Do. 2, = 99
Rungnu ...	...	500	Ditto ...	,,	..	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22,653	22,653	Moss ...	...	2 0 0	Add 78,749
																										Total ... 100,098
Total ...	...	...	.....	...	...	.....	...	...	...	...	..	175,000	...	...	...	...	87	49	...	355	78,345	78,749	.....	...	966 5 0	Instead of ... 175,000

APPENDIX C—*continued.*

Form No. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Sukna Working Circle, Sukna Range, Kurseong Sub-division, 1888-89.

Block.	Compartment.		Class of forest.	Provisions of Working Plan.												Result of operations.										Remarks.
					Timber and fuel.								Other forest produce.			Timber and fuel.							Other forest produce.			
								Yield in cubic feet, solid.						Revenue.				Yield in cubic feet, solid.						Revenue.		
	Number.	Area in acres.		Year of working.	Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	Area taken in hand.	Number of trees felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	
					Acres.									Rs.	Rs.	Acres.								Rs.	Rs. A. P.	
Sukna	3	146	High forest, irregular, with large proportion of thicket and poles.	1888-89	146	Small thinnings	...	...	..	...	38,325	38,325	...	...	...	146	1	298	51*	...	124	473	Bullocks, 220 Cows, 107 ... Compensation for grazing— Sheep, 1 ... Goats, 3 ... Fodder, 60 cooly-loads. Khur grass, bundles 2,632 Broom grass, cooly-loads, 2	... ...	41 4 0 20 1 0 3 0 0 0 15 0 78 8 0 0 12 0	*Slabs.
Kuklong ...	All	744		1888-89	744	Selection fellings.	Sál ... 60 Other ...300	...	.	...	...	...	Bamboos	...	...	744	46	262	...	...	245	507	Bamboos, 8,394 Fodder, cooly-loads, 544. Khur grass, cooly-loads, 32 Broom grass, cooly-loads, 2.	... ...	337 14 0 8 8 0 1 0 0 0 12 0	
Chamta ...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	Khur grass, bundles, 976.	...	29 8 0	
Adalpur ...	2	58		1888-89	58	Small thinnings	...	...	...	...	15,225	15,225	..	...	...	58	...	75	...	...	9,806	9,881	Ditto, 400 ...	...	12 0 0	
Kynanuka ...	...	...		..	...	...	...	...	...	...	...	...	...	...	...	...	...	17	...	...	562	579	Ditto, 32 ...	...	1 0 0	
Rungdung ...	5	133		1888-89	133	Improvement thinnings.	...	...	...	...	151,288	151,288	Bamboos	...	...	133	5	8	...	...	17,500	17,508	Bamboos, 1,636 Khur grass, bundles, 200.	... ...	66 4 0 6 0 0	
Total ...	...	...	...	...	...	...	360	...	...	...	204,838	204,838	.	...	...	...	52	660	51	...	28,239	28,950	.....	...	607 6 0	

APPENDIX C—*continued.*

Form No. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Bamonpokri Working Circle, Bamonpokri Range, Kurseong Sub-division, 1888-89.

Block.	Compartment.		Class of forest.	Provisions of Working Plan.												Result of operations.										Remarks.
					Timber and fuel.								Other forest produce.			Timber and fuel.							Other forest produce.			
								Yield in cubic feet, solid.						Revenue.				Yield in cubic feet, solid.						Revenue.		
	Number.	Area in acres.		Year of working.	Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	Area taken in hand.	Number of trees felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	
					Acres.									Rs.	Rs.	Acres.								Rs.	Rs. A. P.	
Pokri	CI (part) and DI.	45	High forest	1888-89	Not stated.	Primary or principal fellings.	...	...	...	...	16,000	16,000	...	...	...	CI, 30	(a) 3	87	...	...	15,079	15,166 (a) 370	Bamboos, 36...	...	2 4 0	
																							Fodder, cooly-loads, 1,428.	...	22 5 0	
																							Thatch grass, bundles, 174.	...	5 7 0	(a) 2 sâl, at 120 cubic feet=240
																							Burla leaves, cooly-loads, 33	...	0 5 6	1 chilauni =130
Garidhura ...	Whole block.	...	Ditto ...	...	...	Removal of dead wood.	...	Yield not prescribed.						...	...	...	...	...	...	...	832	832	Bamboos, 416	...	17 0 0	
																							Fodder grass, cooly-loads, 104.	...	1 10 0	
																							Gorcha creepers, cooly-loads. 8.	...	0 2 0	
Marianbari ...	Do.	...	Ditto ...	...	...	Ditto ...	...	Yield not prescribed.						...	...	...	...	...	...	...	52	52	Bamboos, 16 ...	...	1 0 0	
																							Fodder grass, cooly-loads, 454.	...	7 1 6	
																							Thatch grass, bundles, 64.	...	2 0 0	
Selim	Do.	...	Ditto ...	...	...	Ditto ...	...	Yield not prescribed.						...	...	...	...	...	...	...	87	87	Bamboos, 1,072	...	44 8 0	
Rakti	DV.	20	Young plantation.	1888-89	20	Periodic thinnings.	...	Yield not prescribed.						...	...	CV, 13 DV, 20 BV, part.	...	41*	...	37,970*	14,350*	52,361	Bamboos, 1,000	...	40 0 0	* Removed by Government Agency.
																							Compensation for buffaloes, 10.	...	10 0 0	
																							Fodder, cooly-loads, 992.	...	15 8 0	
																							Gorcha creeper, cooly-loads, 12	...	0 3 0	
Total ...	...	...	...	...	...	.....	...	...	...	...	16,000	16,000	...	...	...	...	3	128	...	37,970	30,400	68,498 (a) 370	.....	...	169 6 0	

APPENDIX C—*continued.*

FORM No. 2.

FOREST DEPARTMENT, BENGAL.

Register of Yield of the Buxa Reserve Working Circle, Buxa and Borojhar Ranges, Buxa Sub-division, 1888-89.

Block.	Compartment.		Class of forest.	Provisions of Working Plan.												Result of operations.										Remarks.
					Timber and fuel.								Other forest produce.			Timber and fuel.							Other forest produce.			
								Yield in cubic feet, solid.						Revenue.				Yield in cubic feet, solid.						Revenue.		
	Number.	Area in acres.		Year of working.	Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	Area taken in hand.	Number of trees felled or girdled.	Logs.	Scantling.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	
					Acres.									Rs.	Rs.	Acres.								Rs.	Rs. A. P.	
Buxa Range.																										
Block I ...	All	...	High timber sâl.	...	...	Clearances ...	...	...	...	...	...	...	...	...	...	...	(*a*) 85	...	...	...	...	...	.....	...	...	(*a*) Removed by Government agency. Yield of 85 trees 2,522 cubic feet.
Do. II ...	10	1,711	Ditto ...	1888-89	...	Selection fellings.	2,310	...	...	...	...	...	...	...	...	...	(*b*) 79	(*a*) 2,316	...	3,931	...	6,247	.....	...	...	(*b*) 70 ditto, 2,759 cubic feet.
Do. III ...	All	...	Ditto ...	...	...	Clearances ...	...	...	...	...	...	...	...	...	...	...	(*c*) 62	(*a*) 11	...	3,383	7,161	10,555	Bamboos, 1,250 ...	...	15 8 0	(*c*) 43 ditto, 1,766 cubic feet.
																							Grass loads, 3.439	...	53 11 9	
																							Leaf do., 36 ...	...	0 9 0	
																							Jack fruits, 141 ..	...	5 0 6	
																							Compensation for fruits.	...	1 0 0	
Do. IV ...	All	...	Ditto ...	...	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	3	...	...	4,700	...	4,700	Bamboos, 200 ...	...	2 0 0	
																							Grazing elephant, 1,071.	...	74 5 0	
																							Buffaloes, 1,786 ...	...	273 2 0	
																							Cows, 71	...	7 2 6	
Hill forest ..	...	...	Ditto ...	...	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	3	...	...	..	...	...	Grass loads, 149 ...	...	2 5 3	
																							Leaf do., 22 ...	...	0 5 6	
																							Compensation for mangoes ...	...	8 0 0	
Borojhar Range.																										
Borojhar block	All	...	Ditto ...	...	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	(*d*) 3	113	...	5,113	...	5,226	Grass loads, 153 ...	...	2 6 3	
																							Pipul fruits, 9 maunds.	...	120 0 0	(*d*) One tree free grant.
																							*Khagra grass, 1,637 maunds.	26	...	* Free grants.
																							*Cane, 61 maunds	15	...	
Butri do.	All	...	Ditto ...	...	...	Ditto ...	...	...	...	...	...	...	...	...	...	...	...	...	...	808	...	808	.....	...	...	
Total ...	...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	235	2,440	...	17,935	7,161	27,536	Total ...	41	565 7 9	

	c. ft.
198 trees =	7,047
37 " =	3,230
Add	27,536
Total	37,813

APPENDIX C—*continued.*

Form No. 3.

FOREST DEPARTMENT, BENGAL.

Record of Works of Reproduction and Improvement in the Darjeeling Supply Working Circle, Darjeeling Sub-division, 1888-89.

Block.	Compartment No.	Provisions of Working Plan.			Result of operations.		Remarks.
		Year in which to be carried out.	Description of works.	Cost.	Description of works.	Cost.	
DARJEELING STATION SUPPLY CIRCLE.							
				Rs.		Rs.	
					Plantations—		
					Extensions—Dooteria, 60 acres... ...	572	
					Up-keep—Runghul	130	
					Dooteria	57	
					Tungsong	82	
					Goom	158	
					Chongtong	5	
					Total ...	904	
					Roads and paths—		
					Sukiapokri—Manibhanjan 5 miles ...	222	
					Sukiapokri—Ranichuttia, 8 ,, ...	1,061	
					Nai—Rishihat inspection path, 6 miles	402	
					Lower Pashongdong bridle path, 3·5 miles	422	
					Goom block foot-path	11	
					Dooteria ,, ,, 2·7 miles ...	14	
					Blasting powder	86	
					Repairs to roads and paths	647	
					Total ...	2,865	
					Erection of and repairs to buildings, including depôts	1,331	
JALAPAHAR SUPPLY WORKING CIRCLE.							
				Rs.	Plantations—	Rs.	
					Up-keep - Rangnu	63	
					Rangirum	235	
					Poomong	421	
					Total ...	719	
					Roads and Paths—		
					Rangirum inspection path, 4 miles ...	446	
					Repairs to roads and paths	110	
					Total ...	556	
					Erection of and repairs to buildings ...	298	

Form No. 3.

FOREST DEPARTMENT, BENGAL.

Record of Works of Reproduction and Improvement in the Kurseong Sub-division.

Block.	Compartment No.	Provision of Working Plan.			Result of operations.		Remarks.
		Year in which to be carried out.	Description of Works.	Cost.	Description of Works.	Cost.	
SUKNA WORKING CIRCLE.							
				Rs.		Rs.	
Kynanuka	2	1888-89 ...	Planting and re-stocking blanks 3? acres ...	...	.....	...	
Adalpore	All compartments.	1888-89 ...	346 acres to be freed from creepers	...	346 acres freed from creepers	33	
Kuklong	1	1888-89 ...	148 ditto ditto	...	148 ditto ditto	9	
					Total ...	42	
					GENERAL.		
					Planted 300 India-rubber in Sukna block	12	
					Re-stocking Sukna nursery with 4,000 India rubber cuttings	12	
					Hoeing south boundary Chamta, 48 square laggies	2	
					Total ...	26	
					UP-KEEP OF ROADS AND BRIDGES.		
					Clearing Sukna Mahanadi road, ½ mile	3	
					Ditto Chamta and Gumti bridle path, 2 miles ...	7	
					Repairing Adalpur road, 1 mile and one bridge ...	78	
					Clearing Adalpur and Chamta road, 1½ miles, and repairing one bridge	9	
					Clearing Kuklong valley road, 2 miles and 2,640 feet and repairing two bridges	[illegible]	
					Clearing north boundary road, 1½ miles		
					Total		

APPENDIX C—*continued.*

Form No. 3.

FOREST DEPARTMENT, BENGAL.

Record of Works of Reproduction and Improvement in the Kurseong Sub-division.

Block.	Compartment number.	Provisions of Working Plan.			Result of operations.		Remarks.
		Year in which to be carried out.	Description of Works.	Cost.	Description of Works.	Cost.	
BAMONPOKRI WORKING CIRCLE.							
				Rs.		Rs. A. P.	
All	...	1888-89 ...	Up-keep of plantations	...	Up-keep of plantations, nurseries, including pay of mali	72 0 0	
					Planting 4,000 India-rubber cuttings along fire lines	80 0 0	
					Total ...	152 0 0	
Various	Various.	1888-89 ...	346 acres to be freed from creepers	...		...	Particulars not available.
					UP-KEEP OF ROADS, &c.		
					Clearing roads from Garidhura to Rungsung nadi, 3 miles	46 0 0	
					Clearing Rungsung-Pagdandi road, 1 mile and 2,410 feet	8 0 0	
					Clearing compartment roads, 6 miles and 4,620 feet	17 0 0	
					Clearing central cart road, 2 miles and 1,980 feet	31 0 0	
					6 Bridges repaired	31 0 0	
					Clearing Circular Road, 3,300′×12′	3 0 0	
					Total ...	136 0 0	

Form No. 3.

FOREST DEPARTMENT, BENGAL.

Record of Works of Reproduction and Improvement in the Buxa Sub-division.

Block.	Compartment number.	Provisions of Working Plan.			Result of operat.		Remarks.
		Year in which to be carried out.	Description of Works.	Cost.	Description of Works.	Cost.	
BUXA RESERVE WORKING CIRCLE.							
				Rs.		Rs.	
All	.....	1888-89 ...	Roads and Bridges— Dima, Guram, Rajabhatkhawa, and Satali-Patla-Khawa roads to be cleared of grass. The 23rd compartment line of Poro block to be extended up to the west boundary to divide compartments 1, 2, 4, 5, and 6. Grass on compartment lines to be pressed down and cleared. Bridges on streams to be constructed and swampy crossings to be made passable.	...	New roads— 23rd mile continued through Poro block opened	21	
					Repairs to existing lines:— Dima road cleared, 5 miles	56	
					Guram road cleared 4 miles 1,372 feet	49	
					Rajabhatkhawa road cleared, 1 mile 1,858 feet	7	
					Roads at Rajabhatkhawa cleared, 2,640 feet	10	
					Jamguri to Kalcul road cleared, 1 mile	15	
					Grass on compartment lines pressed down, 59 miles	24	
					Temporary bridges constructed on jhoras and swampy crossings made passable	40	
					Satali road cleared, 8 miles 320 feet	90	
					Clearing central compartment line, 3 miles	14	
					Clearing north-south compartment line, 3 miles 1,320 feet ...	15	
					Clearing a path from central compartment line to Alaikuri river, 1 mile 3,760 feet	5	
					Clearing road from Chilapatta house to Chilajhora, 3,200 feet	2	
					Total ...	327	
... ...	.....	"	Buildings:— A new rest-house at Rajabhatkhawa with out-houses and a well; two huts for mahouts.		Buildings:— One rest-house at Rajabhatkawa constructed	618	
					2 out-houses constructed	34	
					2 huts for mahouts	14	
					Making a well in inspection-bungalow compound	20	
...	.....	"	4 huts for forest guards.		4 huts for forest guards	21	

APPENDIX C—*concluded.*

Form No. 3.

FOREST DEPARTMENT, BENGAL

Record of Works of Reproduction and Improvement in the Buxa Sub-division—concluded.

Block.	Compartment No.	Provision of Working Plan.			Result of Operations.		Remarks.
		Year in which to be carried out.	Description of Works.	Cost.	Description of Works.	Cost.	
				Rs.		Rs.	
					Brought forward ...	707	
					Repairs to buildings :— All buildings repaired for	574	
					Total ...	1,281	
Buxa, all blocks ...	...	1888-89 ...	Demarcation— All the demarcated boundary lines to be cleared, boundary posts renewed, numbered, and renumbered in every case where necessary.	...	Demarcation :— 33 miles 3,907 feet boundary lines cleared of grass.	411	
Main Borojhar ...	...	,, ...			277 boundary posts renewed and 617 posts renumbered.	36	
					12 miles 994 feet boundary lines cleared	132	
					10 boundary posts renewed, 4 repaired, and 10 renumbered.	1	
					Total ...	580	
Buxa III	15	,, ...	Plantations— Weeding mahogany plantation at Rajabhatkawa and clearing grass from all other plantations where necessary.	...	Plantations :— Weeding mahogany plantation in compartment 15, fencing round it, and preparing beds for seeds.	46	
Borojhar	...	,, ...			Planting, retransplanting sissu plants round Chilapatta rest-house.	4	
					Total ...	50	
Buxa, all blocks ...	...	,, ...	Fire protection...	...	Fire protection :— 53 miles fire lines cleared	702	
Main Borojhar ...	...	,, ...			Pay of fire patrols	578	
					Outside grass burnt and camping ground cleared.	36	
					3 miles 528 feet fire lines cut	15	
					Pay of fire guards	244	
					Total ...	1,575	
			Creeper-cutting— Creepers to be cut in the following areas—		Creeper cutting :—		
III—Rajabhatkawa	15	,, ...	1,051 acres	...	Block II, compartment 10, 1,071 acres	58	Cut in 1887-88, but not paid for during that year.
Ditto ...	16	,, ...	1,456 ,,		Ditto ditto 8, 785 ,,		
Ditto ...	17	,, ...	894 ,,		Ditto ditto 6, 1,136 ,,	...	Not paid during the year.
Ditto ...	18	,, ...	1,657 ,,		Block III, ditto 16, 1,280 ,,		
II—Poro	6	,, ...	1,136 ,,		Ditto ditto 17, 200 ,,		
					Ditto ditto 18, 1,280 ,,		
					Sample plots A, B and C cleared ...	6	
Borojhar	...	,, ...	Borojhar sâl tract	...	Borojhar sâl tract, 196 acres	6	
					Ditto, 1,804* ,, ...	...	Not paid for during the year.
					Total ...	70	

APPENDIX D.

Services of Officers.

Mr. H. H. Davis, Deputy Conservator of Forests, 1st grade, retained charge of the Chota Nagpore Division and of the Hazaribagh sub-division throughout the year, and has continued as usual to do good service.

Mr. R. H. M. Ellis, Deputy Conservator, 2nd grade, continued in charge of the Sunderbuns Division during the year, except for 3 months from 30th June 1888, when he was absent on privilege leave. He officiated in the 1st grade of Deputy Conservators from 26th September to 4th December, and again from 31st December 1888, and has fully maintained his reputation as an energetic officer.

Mr. G. A. Richardson, Deputy Conservator, 3rd grade, was in charge of the Orissa Division and of the Khorda sub-division throughout the year, and officiated in the 2nd grade of Deputy Conservators from 30th June to 29th September 1888 ; he has also worked well.

Mr. E. G. Chester, Deputy Conservator, 3rd grade, reported his return to India from furlough on 13th November 1888, when he was posted on deputation to the Andamans and assumed charge of his duties there on 22nd idem.

Mr. F. B. Manson, Deputy Conservator, 3rd grade, was in charge of the Darjeeling Division and of the Darjeeling sub-division throughout the year ; he also continued to hold charge of the Teesta sub-division in addition to his other duties to the 3rd September 1888, and had again to assume charge of that sub-division from the 28th March 1889. Mr. Manson has had to bear more than his fair share of responsibilities throughout the year, and has exerted himself to keep his extensive charge in working order.

Mr. W. M. Green, Deputy Conservator, 4th grade, continued to officiate in the 3rd until he was confirmed in that grade with effect from 4th October 1888. He r

charge of the Julpigori Division and of the Buxa sub-division throughout the year, except from 23rd June to 4th October owing to his temporary transfer to the Sunderbuns Division, and has done good service.

Mr. A. R. Grant, Deputy Conservator, 4th grade, has continued absent on furlough throughout the year.

Mr W. Johnston, Deputy Conservator, 4th grade, retired from the service on medical certificate with effect from 7th May 1888.

Mr. C. A. G. Lillingston, Deputy Conservator, 4th grade, was granted by Her Majesty's Secretary of State two months' extraordinary leave in extension of the special leave for six months of which he availed himself from 26th April 1888, and assumed charge of the Palamow sub-division, Chota Nagpore Division, with effect from 27th January 1889; his application for further extension of extraordinary leave by one month and one day is before Government. He spent February and the greater part of March on tour in his sub-division.

Mr. M. S. Fowler, Officiating Assistant Conservator, 1st grade, on transfer from the Central Provinces, reported his arrival in Calcutta on 2nd April 1888, from which date he was promoted to the 4th grade of Deputy Conservators. He was in charge of the forests in the Andamans with effect from 21st April to 3rd October; on privilege leave from 4th October to 3rd December, and assumed charge of the Working Plans Division with effect from 5th December 1888. Mr. Fowler officiated in the 3rd grade of Deputy Conservators from 21st April to 21st November 1888; the performance of his duties in the Working Plans Division was much interfered with owing to his bad state of health.

Mr. R. L. Heinig, Assistant Conservator, 1st grade remained in charge of the Chittagong Division throughout the year. and continued to officiate in the 4th grade of Deputy Conservators to 26th January 1889; he also officiated in the 3rd grade of Deputy Conservators from 30th June to 29th September 1888, and has done good service as usual.

Mr. C. G. Rogers, Assistant Conservator, 3rd grade, having passed in Hindustani by the Higher and Lower standards, and "*with credit*" both in Land Revenue and in Forest Law, was promoted to the 2nd grade of Assistant Conservators from 7th November 1888; he also officiated in the 1st grade of Assistant Conservators from that date to 26th January 1889. Mr. Rogers was in charge of the Kurseong sub-division, Darjeeling Division, from 7th April 1888 to the close of the year, and is an excellent officer.

Mr. H. D. D. French, Assistant Conservator, 3rd grade, was absent on leave on medical certificate from 7th April to 16th October 1888; he remained attached to the Darjeeling sub-division to the close of the year, and has worked well.

Mr. H. H. Haines, Assistant Conservator, 3rd grade, appointed by the Secretary of State, joined the Department from 1st January 1889, and was attached to the Working Plans Division to the close of the year. He promises well and takes much interest in his work.

Mr. E. E. Wylly, Sub-Assistant Conservator, 1st grade, was attached to Sunderbuns Division throughout the year, except from 23rd June to 4th October 1888, when he was in charge of the Julpigori Division and of the Buxa sub-division, and has rendered very good service.

Baboo Sree Dhur Chuckerbutty. Sub-Assistant Conservator, 2nd grade, remained in charge of the Singbhoom sub-division, Chota Nagpore Division, to the 5th March 1889, and assumed charge of the Julpigori sub-division, Julpigori Division, from 25th idem. He has continued to work well.

Mr. J. C. Mendes, Sub-Assistant Conservator, 3rd grade, on being relieved of the charge of the Julpigori sub-division, proceeded on privilege leave for 3 months from 2nd June, and was afterwards in charge of the Teesta sub-division, Darjeeling Division, from 4th September 1888 to 27th March 1889; he was then transferred on deputation to the Central Provinces. He continued to work fairly well during the year.

Babu Shama Churn Chuckerbutty, Sub-Assistant Conservator, 3rd grade, continued in charge of the Angul sub-division, Orissa Division, throughout the year. The Divisional Officer reports that he has worked fairly well, but is inclined to be dilatory in carrying out orders.

Mr. E. E. Slane, Sub-Assistant Conservator, on probation, obtained the Ranger's certificate at the Dehra Dun Forest School on 14th July 1888, and was appointed to be a Sub-Assistant Conservator, 3rd grade, from that date; he has since served in the Chota Nagpore Division: in charge Palamow sub-division, 10th August 1888 to 26th January 1889; in charge Northern Range of that sub-division, 6th to 15th February; in charge Singhboom sub-division from 6th March 1889. Mr. Slane has shown a decided want of knowledge of departmental rules and procedure, a want of accuracy in official statements, and a tendency to argue the point when mistakes are brought to his notice by the Divisional Officer; the Conservator trusts that he will exert himself and remedy these defects.

Mr. R Quinnell, Sub-Assistant Conservator, on probation, obtained the Ranger's certificate at the Dehra Dun Forest School on 27th March 1889, having passed "*with honour*" and gained a prize in Forest Law, and has subsequently been appointed a Sub-Assistant Conservator. 3rd grade, with effect from that date.

Mr. E. J. N. James, Sub-Assistant Conservator, on probation, at the Dehra Dun Forest School, having failed in Vegetable Morphology and Physiology at the March 1889 examination, has been allowed to remain at the school for a further period of 3 months.

R. D'R. & others—Reg. No. 9/7J—375—16-8-89.

REVENUE DEPARTMENT.

FORESTS.

CALCUTTA, THE 10TH SEPTEMBER, 1889.

RESOLUTION.

READ—

The Progress Report of the Forest Administration in Bengal for 1888-89.

The Report is written by the Conservator, Mr. A. L. Home, and was received by Government 17 days after the date prescribed for its submission. The chief points connected with the administration of the Department during the year under review are the continued increase of revenue in the Sunderbans, the depression of trade in the produce of Chittagong, attributed to the frontier raids which prevented access to the more remote forests, and the decrease of revenue in the Orissa Division owing to the grant of considerable concessions to the inhabitants during the scarcity that has marked the season.

Area of forests.

2. The total area under the management of the Forest Department on the 31st March, 1889, amounted to 7,447,789 acres, of which 3,192,535 acres were covered by Reserved forests, 1,449,262 acres by Protected forests, 2,581,420 acres by Unclassed State forests and waste lands, and 224,572 acres by proposed reserves. In the classes of Reserved and Protected forests there was a net increase of 1,154 and 48,100 acres, respectively, while the area of Unclassed State forests and waste lands remained unchanged. The tracts, which it is contemplated to reserve under section 4 of the Forest Act, lie for the most part in Chota Nagpore, and the question of their reservation is still under the consideration of Government. The section referred to was applied to the Ramgurh-Sitakund forest in Chittagong in October last, and similar action has been taken since the close of the year as regards the Rajin block in Khoorda.

Demarcation and Surveys.

3. Fair progress appears to have been made in demarcation work, the total length of boundaries demarcated by means of posts or pillars being 2,176·8 miles and that of natural boundaries 1,349·9 miles. The total expenditure debited to "Demarcation" was Rs. 7,091, the average cost per mile of new demarcation remaining at Rs. 16, and that of the maintenance of old boundaries being Rs. 6-2 per mile as against Rs. 7-2 in the preceding year.

The surveys undertaken by the Department were unimportant. A party of the Imperial Survey Department of India completed the survey of the inner and outer boundaries of the Singbhoom sub-division, with the exception of a portion of the southern boundary of the Saranda forests, and in the Angul sub-division 75 miles of boundaries are understood to have been surveyed by the Cadastral Survey Party.

Establishment.

4. It is again to be regretted that, owing to the continued ill-health, necessitating eventually the departure, on furlough, of Mr. Fowler, the Deputy Conservator entrusted with the duty, but little has been done as regards the preparation of working plans. The services of another officer, Mr. Manson, have, however, now been made available for the sole charge of the Working Plans Division, and the Lieutenant-Governor desires once more to express a hope that more substantial progress will be reported in this direction during the current year. The vacancy in the superior staff, caused by the retirement from the service of Mr. Johnston, was filled by the appointment of Mr. H. H. Haines from Cooper's Hill as an

Assistant Conservator, with effect from the 1st January, 1889. Mr. Chester, a Deputy Conservator of the third grade, was posted, on his return from furlough last November, to the Andamans as officer in charge of the forests there, and Mr. J. C. Mendes, one of the seven Sub-Assistant Conservators attached to Bengal, was temporarily transferred to the Central Provinces. Owing no doubt to this depletion of the executive staff, it was found impossible to depute any of its members to the Dehra Dun Forest School during the year under report. The difficulties mentioned in previous reports in obtaining recruits in Bengal for the class of Forester continue to be experienced, and are as usual attributed to the preference evinced for sedentary employment.

The Conservator has to record a remarkable increase in the number of serious offences laid to the charge of members of the lower grades of the Department, and the fact is all the more unsatisfactory, since most of the prosecutions instituted were unsuccessful. In fact, there could scarcely have been a worse record; for in only three out of 13 cases, some of them involving the gravest of charges, were convictions obtained and upheld on appeal; nor can the Lieutenant-Governor feel in any degree re-assured by Mr. Home's statement, in the face of these facts, that "he has no doubt that every case prosecuted by the Department was a true one."

Breaches of the Forest Law.

5. The number of cases of breaches of the forest law taken into court during the year was only 254 against 516 in 1887-88 and 839 in 1886-87, the decrease being chiefly in the Darjeeling and Orissa Divisions, and there was also a falling off by 417 cases in the number of offences compounded out of court. The relaxation of the forest rules in Orissa, directed by the Lieutenant-Governor in consequence of the partial failure of the crops, contributed no doubt largely to these results; but the Conservator must clearly be at fault in ascribing to the same cause the decrease shown in the percentage of convictions in that quarter. "Hard times" may well have justified the exercise by the executive of leniency in refraining from instituting prosecutions, but can scarcely have afforded grounds for judicial convictions or discharges.

Protection from fire.

6. The area of forests liable to fire which the Department took steps to protect by means of isolation covered 1,133,933 acres, against 1,001,357 acres in the previous year, while less extensive measures were taken over 126,249 acres, or 7,040 less than in 1887-88. Of the total area thus protected, only 75·6 per cent. escaped fire, a poor result as compared with those of other years, and attributable apparently to the fact that far too much was attempted in Singbhoom in the direction of isolation.

Grazing.

7. No changes were made in the grazing rules in force except in Khoorda, where they were somewhat relaxed. In the Darjeeling sub-division they are said to have worked smoothly, and it is gratifying to learn that the arrangement made with the graziers, by which they were permitted to graze a larger percentage of cattle on the condition of their remaining unconvicted of any forest offence for 12 months, was entirely successful. The revenue derived from grazing fees and the sale of fodder grass aggregated Rs. 4,191 against Rs. 3,441 in 1887-88.

Natural and artificial reproduction.

8. Natural reproduction is favourably reported upon in most quarters. Oak and magnolia in particular seeded profusely in the Darjeeling sub-division, but the Conservator complains that progress is here somewhat retarded by the increase of grazing, especially in the Singalila Range. Good results generally were obtained with sâl in the Kurseong, Buxa, Julpigoree, Palamow, and Hazaribagh sub-divisions, and in the Sunderbans the natural reproduction of sundri seems to have been all that could be desired.

The area of regular plantations was increased during the year by 142 acres, and that of cultural operations by 24 acres, while the cost of both, covering the maintenance of old plantations and the formation of nurseries, amounted to Rs. 6,837, the average expenditure over the total area under artificial reproduction being Rs. 45 per acre, as in 1887-88.

9. The outturn of wood, including timber and fuel, during the year was 27,793,504 cubic feet against 26,041,197 cubic feet in the previous year, and the following statement compares the operations of the year with those of its predecessor:—

Outturn.

	By Departmental Agency.		Permit-holders.		Free grants.		Total.	
	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Reserved forests—								
Timber	41,909	64,298	7,251,321	8,466,557	23,778	15,401	7,317,008	8,546,256
Fuel	255,575	283,206	11,014,866	10,842,602	1,000,000	1,001,321	12,270,441	12,127,129
Total .	297,484	347,504	18,266,187	19,309,159	1,023,778	1,016,722	19,587,449	20,673,385
Protected forests—								
Timber	.....	20	401,420	247,693	560	2,659	401,980	240,372
Fuel	.....	.....	5,670,917	3,378,416	.....	3,000,168	5,670,917	6,379,584
Total ...	.....	20	6,072,337	3,617,109	560	3,002,827	6,072,897	6,619,956
Unclassed forests—								
Timber	13,113	14,295	281,514	295,462	800	.....	295,427	309,757
Fuel	12,512	12,701	72,912	177,705	.....	.....	85,424	190,406
Total ...	25,625	26,996	354,426	473,167	800	.....	380,851	500,163
All Forests ... Total Timber ..	55,022	78,613	7,934,255	8,999,712	25,138	18,060	8,014,415	9,096,385
All Forests ... Total Fuel ...	268,087	295,907	16,758,695	14,399,723	1,000,000	4,001,489	18,026,782	18,697,119
GRAND TOTAL ...	323,109	374,520	24,692,950	23,399,435	1,025,138	4,019,549	26,041,197	27,793,504

The Conservator explains that the decrease in the quantity of fuel removed by permit-holders is due, in the case of reserved forests, chiefly to fluctuations in the demand in the Sunderbans, and, in that of protected forests, to the relaxation of the rules in Khoorda, to which reference has already been made.

Financial results.

12. The financial results of the season compare as follows with those of the four preceding years:—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1884-85	5,71,152	4,11,915	1,59,237
1885-86	5,97,432	3,70,399	2,27,033
1886-87	6,53,634	4,22,781	2,30,853
1887-88	6,57,794	3,90,368	2,67,426
1888-89	6,76,907	3,68,169	3,08,738

The increase in the surplus over the previous year is Rs. 41,312, the receipts being Rs. 19,113 greater and the charges Rs. 22,199 less than in 1887-88, and the result is creditable to the Conservator and the officers of the Department generally.

10. The Conservator's remarks on the character and work of his subordinates, which are, with a single exception, favourable, will as usual be brought to the notice of the Appointment Department. The Lieutenant-Governor desires to acknowledge the services rendered by Mr. Home in the administration of the Forest Department.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Offg. Secretary to the Govt. of Bengal.

No. 3460—534For.

COPY, with copy of the Report, submitted to the Secretary to the Government of India, Revenue and Agricultural Department, for information.

By order of the Lieutenant-Governor of Bengal,

H. W. C. CARNDUFF,

Under-Secretary to the Govt. of Bengal.

CALCUTTA,
REVENUE DEPT.—*Forests,*
The 11th September 1889.

W. LeR.—Reg. No. 3915C—466—12-9-89.

No. 172-F., dated Simla, 8th March 1890.

From—SIR E. C. BUCK, Officiating Secretary to the Government of India, Revenue and Agricultural Department,

To—The Secretary to the Government of Bengal, Revenue (Forests) Department.

I AM directed to acknowledge the receipt of Mr. Carnduff's endorsement No. 3460-534 (Forests), dated the 11th September last, forwarding the Progress Report of Forest Administration in Bengal for the year 1888-89, with His Honour the Lieutenant-Governor's Resolution thereon. The Report, which was submitted by the Conservator some days after the date on which it was due, was received by the Government of India on the 17th, instead of on the 1st, of September.

2. The alterations made during the year in the areas under the control of the Department are unimportant. The area of Reserved Forests was increased by nearly two square miles. A net increase of some 75 square miles is recorded under the head of Protected Forests, but of this area nearly 70 square miles are merely a nominal addition due to corrections in estimated areas. In the Sundarbans Division 17 square miles were added to the Protected Forests, while 11 square miles were disforested in the interests of cultivation. The area of Unclassed Forests and Waste Lands under the control of the Department remained unchanged. Forests *gazetted* under the Indian Forest Act still cover only 4 per cent. of the entire area of the Province; but it is reported that further tracts, aggregating 351 square miles, were under settlement at the close of the year with a view to reservation. Some of these areas have now been under settlement for many years, and I am to urge the desirability of their being finally dealt with on an early date.

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3. It is observed that His Honour the Lieutenant-Governor has remarked on the slow progress made in the preparation of Working-Plans, which circumstance the Conservator explains to be due to a paucity of officers. Working-Plans are essential to systematic control, and must be provided for the more important forests with as little delay as possible. In view of the large area concerned and the limited number of special officers available for such duties, it is clear that they cannot, unaided, prepare Working-Plans for all forests within any measurable period; and, under these circumstances, it seems desirable that Working-Plans officers should obtain the assistance of other local officers in compiling under their direction suitable Working-Plans for the less important tracts. I am further to suggest that Divisional officers should have their special attention directed to the necessity of collecting data in anticipation of the preparation of Working-Plans, and be required to devote as much of their time to this duty as is compatible with other work.

The information relating to the carrying out of the detailed prescriptions of existing Plans, given in Appendix C of the Conservator's Report, need not have been printed, as it has to be recorded in Control Books prescribed for the purpose.

4. Since the financial prospects of Forest Administration in Bengal will not admit of the development of the Controlling Staff by the appointment of a greater number of Europeans, the management of the forests must be largely

entrusted to Sub-Assistants and Rangers, and His Excellency the Governor General in Council considers that the Forest School at Dehra Dun should be more extensively utilized for the training of officers of these classes. The difficulties experienced in obtaining recruits for the class of Forester are again commented upon by the Conservator; and it would seem to the Government of India advisable to consider whether additional inducements, in the shape of improved pay or prospects, are required in order to attract suitable candidates in sufficient numbers or whether the general improvement of the position of Natives under the reorganization scheme submitted by the Local Government will not, if sanctioned, make forest service more popular even in the lowest grades.

The large number of serious offences laid to the charge of the subordinates of the Department, in the majority of cases without sufficient evidence, is a regrettable feature of the history of the year's work in Bengal. The Conservator has not satisfactorily explained either the number of prosecutions or the failure to obtain convictions; but the Government of India apprehends that the large number of prosecutions may indicate laxity of supervision, and that the small percentage of convictions obtained may point to errors of judgment. The remarks of the Bengal Government in this connection seem to be fully deserved.

5. The number of prosecutions for breaches of the Forest Law was less than in the previous year by 50 per cent., and fewer offences were compounded. The relaxation of the Forest Rules in Orissa, on account of the scarcity which prevailed at the time, was the chief cause of the decrease in offences both prosecuted and compounded. The percentage of convictions obtained in Court fell from 91 in the previous year to 80 in the year under review, and the explanation afforded by the Conservator is inadmissible, as pointed out by His Honour the Lieutenant-Governor. From para. 30 of the Conservator's Report for 1887-88 and para. 26 of the present Report, it would seem to the Government of India that breaches of rules are not adequately dealt with in the Sundarbans Forests. The area of these forests, which are of much importance to the Districts about Calcutta, is almost one-third of the total area under the control of the Forest Department in Bengal, while the Surplus derived from them alone prevents the working of the Bengal Forests from being a financial failure. If, therefore, an increase of establishment is required in order to provide sufficient Foresters to admit of their undertaking the prosecution of offenders without interfering with the regular work at the revenue stations, I am to suggest that the question should be duly considered by the Local Government. It has been noticed that each square mile of forest in Bengal yields on an average Rs. 59 a year, of which Rs. 15 are expended on establishments, and that in the Sundarbans Division a square mile yields Rs. 124 and costs in establishments only Rs. 10.

6. The area it was attempted to protect from fire was considerably increased, but on the other hand the area passed over by fires also increased considerably, namely, from 12 per cent. of the area protected in 1887-88 to 27 per cent. during the year under review. This increase in the area of failures would appear to be chiefly due to attempts to extend protection too hastily in one Division. At present 35 per cent. of the total area of Reserved Forests are specially protected from fire at an average cost of Rs. 13 per square mile.

The information given in the Conservator's Report with regard to the protection of the forests from grazing is deficient in so far that he has not stated what

areas were grazed over and what areas were closed to grazing, the general reason why they were so closed, and the effect of the measures taken. The Conservator's remarks lead to the impression that sufficient attention is hardly paid to the important subject of protecting the forests from grazing.

7. The remarks of the Conservator regarding natural reproduction are interesting and to the point, and the results reported are generally favourable. The tendency noticed by the Conservator of the *Null* grass to take possession of the ground in the Sundarbans forests, where these are overworked, has frequently been observed in other forests having a damp soil, where the cover overhead has been too much opened out; and it is most important that further inquiry should be made as to whether the coppicing of the *Sundri* trees felled is sufficiently vigorous (in the case of the Sundarbans forests) to prevent grass taking permanent possession of the soil. This is all the more necessary as the system of working the Sundarbans forests by means of fellings made, practically without supervision, by permit-holders, might easily lead to the conversion of large forest areas into grass lands.

The plantation work done during the year was unimportant, and only comprised the addition of 142 acres to the area under Regular Plantations and of 24 acres to that under Cultural Operations, Rs. 6,837 having been expended on this work and on the filling in of blanks and the upkeep of existing plantations. It seems a question whether the partial failure of operations in the *Ficus elastica* nursery in the Chittagong Division might not have been avoided, as all the conditions necessary for the successful cultivation of this plant are now well known.

8. The outturn of timber and fuel is recorded as 27,793,504 cubic feet, as compared with 26,041,197 cubic feet in the previous year; and the value of the minor forest produce removed was Rs. 3,42,047, as against Rs. 3,03,506 in the previous year.

The following statement shows the outturn compared with that of the year 1887-88:—

Year.	Removed by Government Agency.				Removed by Purchasers.				Free Grants.				Total.			
	Timber.	Fuel.	Bamboos.	Minor produce *	Timber.	Fuel.	Bamboos.	Minor produce *	Timber.	Fuel.	Bamboos.	Minor produce *	Timber.	Fuel.	Bamboos.	Minor produce *
	C. ft.	C. ft.	No.	Rs.	C. ft.	C. ft.	No.	Rs.	C. ft.	C. ft.	No.	Rs.	C. ft.	C. ft.	No.	Rs.
1888-89 ...	78,613	295,907	10,28,221	10,916	8,999,712	14,399,723	14,607,718	1,31,803	18,060	4,001,489	3,781,610	1,99,328	9,096,385	18,697,119	19,417,549	3,42,047
1887-88 ...	55,022	268,087	11,31,781	11,298	7,934,255	16,758,695	15,690,126	1,38,133	25,138	1,000,000	298,800	1,54,075	8,014,415	18,026,782	17,120,707	3,03,506
Increase or decrease in 1888-89.	+23,591	+27,820	−103,560	−382	+1,065,457	−2,358,972	−1,082,408	−6,330	−7,078	+3,001,489	+3,482,810	+45,253	+1,081,970	+670,337	+2,296,842	+38,541

* Includes value of Bamboos.

The considerable increase in the quantity of fuel and bamboos removed under free grants was due to the relaxation of rules and to concessions made in the Pooree District in Orissa, where a general scarcity prevailed. The increase under free grants caused a decrease in the produce removed by purchasers.

The total outturn of timber and fuel per square mile from all classes of forests was 2,463 cubic feet, as compared with 2,323 cubic feet in the previous year. The Reserves yielded 4,145 cubic feet per square mile.

9. The financial results of the year compare favourably with those of 1887-88. The surplus, however, which exceeds that of the previous year by Rs. 41,312 and has risen to more than 45 per cent. of the gross revenue, is entirely due to the revenue derived from produce removed by purchasers from forests in the Sundarbans Division. The forests of the other divisional charges taken together were worked at a loss of Rs. 19,076, as will be seen from the following statement :—

Divisions.	Gross Revenue.	Expenditure.			Surplus.	Deficit.
		Conservancy and Works.	Establishments.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sundarbans	4,36,276	43,828	36,286	80,114	3,56,162	...
All other Divisions excluding Direction.	2,37,477	1,11,865	1,44,688	2,56,553	...	19,076
Direction Division	3,154	2,562	28,940	31,502	...	28,348
TOTAL ...	6,76,907	1,58,255	2,09,914	3,68,169	3,08,738	...

The financial condition of each of the other Divisions will appear from the following statement :—

Name of Division.	Gross Revenue per square mile.	Cost of Establishment employed per square mile.	Cost of Works of Improvement and Maintenance per square mile.	Total Expenditure per square mile.	Surplus per square mile.	Deficit per square mile.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Darjeeling ...	240	102	117	219	21	...	These figures do not include any portion of the "Direction" charges.
Jalpaiguri ...	60	44	41	85	...	25	
Chota Nagpore ...	22	43	30	73	...	51	
Sundarbans ...	124	10	13	23	101	...	
Chittagong ..	14	4	2	6	8	...	
Orissa ...	19	28	15	43	...	24	
TOTAL AVERAGE ...	59	15	14	29	30	...	

Attention has been called for the past two years to the fact that several Divisions and Sub-Divisions were being worked at a loss, and in the review of the Administration Report for 1887-88 the Government of India expressed a desire to be furnished with a memorandum in which the cause of the deficits and the prospects of improvement in the financial aspect of each Division and Sub-Division should be briefly discussed. This memorandum was received on the 17th January and is now being considered by the Government of India. There may be in respect to each Forest which shows a deficit good grounds for the excess of expenditure over income; but they should, if they exist, be clearly set forth by the Conservator and accepted by the Local Government.

Appendix showing the discrepancies noticed in the Forms appended to the Bengal Forest Administration Report for 1888-89.

In the statements accompanying the Report, the Sub-Division is made the *unit*, instead of the Division, and the Divisional Cash Books do not appear to contain the record required by paragraph 138 of the Forest Department Code.

FORM NO. 49A.

(Area of Protected Forests.)

The equivalent of 1,449,262 acres on 31st March 1889 is entered as 2,265 square miles, instead of 2,264 square miles.

FORM NO. 54.

(Outturn of Timber and Firewood.)

The total quantity of Timber removed from Reserved Forests by Government Agency is shown as 63,938 cubic feet, whereas the addition of the detailed figures gives a total of 64,298 cubic feet.

FORM NO. 55.

(Outturn of Minor Forest Produce.)

In the "Abstract" of the Form (page 49), the total value of "Other Minor Produce" removed from Reserved Forests by Government Agency is shown as Rs. 278, whereas the addition of the actual figures given in the body of the Form amounts to Rs. 553.

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